

KENDRIYA VIDYALAYA NO.2 ITANAGAR



SESSION:- 2022-2023

TOPIC: HOSPITAL MANAGEMENT SYSTEM

SUBMITTED BY: SUBMITTED TO:

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CLASS:- 'XII' 'A'

ROLL NO .:- 24

CBSE ROLL NO .:-

CERTIFICATE

This is to certify that JATIN KUMAR of class: XII A of KENDRIYA VIDYALAYA NO.2 has done his project on HOSPITAL MANAGEMENT SYSTEM under my supervision. He has taken interest and has shown at most sincerity in completion of this project.

I certify this project up to my expectation & as per guidelines issued by **CBSE**, **NEW DELHI**.

Internal Examiner

External Examiner

principal

<u>ACKNOWLEDGMENT</u>

It is with pleasure that I acknowledge my sincere gratitude to our teacher, *MR. S.K. MISRA* who taught and undertook the responsibility of teaching the subject computer science. I have been greatly benefited from his classes.

I am especially indebted to our Principal *MR*. *K R MEENA* who has always been a source of encouragement and support and without whose inspiration this project would not have been a successful I would like to place on record heartfelt thanks to him.

Finally, I would like to express my sincere appreciation for all the other students for my batch their friendship & the fine time that we all shared together

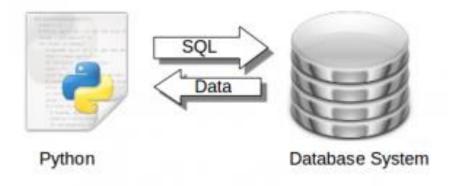
HARDWARE AND SOFTWARE REQUIRED

HARDWARE

- 1. PC
- 2. MOBILE PHONE

SOFTWARE

- PYTHON (latest version)
- MYSQL
- PYTHON CONNECTOR



HOSPITAL

A hospital is a health care institution providing patient treatment with specialized staff and equipment. Hospital are usually funded by public sector by health organizations (for profit or non-profit), by health insurance companies, or by departments (e.g., surgery, and urgent care etc).

HOSPITAL MANAGEMENT SYSTEM

A hospital management system is an information system that manages the aspects of a hospital. This may include the administrative, financial, and medical processing. It is an integrated end-to-end Hospital Management System that provides relevant information across the hospital to support effective decision making for patient care, hospital administration and critical financial accounting, In a seamless flow. This program can look after Inpatients, OPD patients, records, database treatment, status illness, billing etc. it also maintains their hospital info such as ward id, Doctor in charge, Department administering etc.

NEED OF HMS

- 1. Minimized documentation and no duplication of records.
- 2. Reduced paper work.
- 3. Improved patient care
- 4. Better Administration Control
- 5. Faster information flow between various departments
- 6. Smart Revenue Management
- 7. Effective billing of various services
- 8. Exact stock information

INTRODUCATION

The project Hospital Management System includes registration of patients, storing their details into the system. The software has the facility to give a unique id for every patient and stores the details of every patient and the staff automatically. It includes a search facility to know the current status of each room. User can search availability of a doctor and the details of a patient using the id. The Hospital Management System can be entered using a username and password. It is accessible either by an administrator or receptionist. Only they can add data into the database. The data can be retrieved easily. The interface is very user-friendly. The data are well protected for personal use and makes the data processing very fast. The purpose of the project entitled as "HOSPITAL MANAGEMENT SYSTEM" is to computerize the Front Office Management of Hospital to develop software which is user friendly, simple, fast, and cost-effective. It deals with the collection of patient's information, diagnosis details, etc., and also to manipulate these details meaningfully System input contains patient details, diagnosis details; while system output is to get these details on to the screen.

EXISTING SYSTEM

- In today's world if someone wants to book a Doctor's Appointment we need to call in clinic or personally go to that place and book the appointment.
- ❖This consumes precious time of the patient. Also if the doctor cancels his /her schedule, the patient does not come to know about it unless he/she goes to the clinic.

DISADVANTAGES OF EXISTING SYSTEM

- 1. Lack of privacy
- 2. Risk in the management of the data.
- 3. Less security
- 4. Less user-friendly
- 5. Accuracy nor guaranteed
- 6. Not in reach of distant users.
- 7. There is no storage and automation if users have some enquiry.

ADVANTAGES OF HMS

- Less paperwork
- Costs Reduction
- Improves patient's experience
- Improve data security
- Better collaboration & Communication
- Analytic anytime anywhere

MODULE LIST

ADMIN

- ADD PATIENTS
- ADD STAFF
- VIEW PATIENTS RECORD
- VIEW STAFF RECORD
- CHANGE PASSWORD
- REMOVE PATIENTS
- REMOVE STAFF
- UPDATE PATIENT
- UPDATE STAFF INFORMATION
- ADD DOCTOR
- REMOVE DOCTOR
- CHECK DOCTOR JOB STATUS

PATIENT

- BOOK APPOINTMENT
- FIND DOCTOR
- VIEW DOCTOR PROFILE

DOCTER

- LOGIN
- APPLY JOB
- VIEW APPOINTMENT

python connector

import mysql.connector

obj=mysql.connector.connect(host="localhost",user="root",passwd="Jatin@2005") mycursor=obj.cursor()

create databases

mycursor.execute("create database if not exists covid") mycursor.execute("use covid")

create table for patient

mycursor.execute("create table if not exists patient(patientid int auto_increment primary key,pname varchar(30) not null,page int(3)not null,pgender varchar(6) not null,phoneno bigint(10) not null,admitdate date,patient_problem varchar(30) not null)")

create table for staff

mycursor.execute("create table if not exists staff(staffid int auto_increment primary key, staffname varchar(30)not null, staffage int not null, staffgender varchar(6)not null, staffphoneno bigint not null, dateofjoining date, salary int)")

create table for change the password of admin section

mycursor.execute("create table if not exists password(password varchar(30) not null)")

Activate Windows

create table for patientrecord

mycursor.execute("create table if not exists patientrecord(patientid int not null,pname varchar(30) not null,page int(3) not null,pgender varchar(6) not null,phoneno bigint(10) not null,admitdate date,dischargedate date)")

create table for staffrecord

mycursor.execute("create table if not exists staffrecord(staffid int not null,staffname varchar(30)not null,staffage int not null,staffgender varchar(6)not null,staffphoneno bigint not null,joiningdate date,salary int,total_working_day date)")

create table for doctor

mycursor.execute("create table if not exists doctor(doctorid int auto_increment primary key,doctorname varchar(40)not null,department varchar(40)not null,gender varchar(6) not null,work_experience int(5) not null,phone_number bigint(10) not null,dateofjoinig date,salary int (10)not null)")

create table for department wise salary

mycursor.execute("create table if not exists salary(department varchar(40)not null,salary int(7) not null)")

create table for doctor job

mycursor.execute("create table if not exists job(apply_id int auto_increment primary key,apply_job_date date,dname varchar(40),department varchar(10),work_experience int(5),gender varchar(6),phone_number bigint(10) not null,status varchar(10))")

create table for doctor record

mycursor.execute("create table if not exists doctorrecord(doctorid int ,doctorname varchar(40)not null,department varchar(40)not null,gender varchar(6) not null,phone_number bigint(10) not null,dateofjoinig date,date_of_relived date)")

Activate Windows

Go to Settings to activate Windows

```
# create table for symptoms and department
mycursor.execute("create table if not exists symptoms and dept(symptoms varchar(50), department varchar(40))")
# create table for login
mycursor.execute("create table if not exists login(name varchar(30) not null,mobile_number bigint(10) unique,password varchar(20) unique)")
# create table for appointment
mycursor.execute("create table if not exists appointment(patient name varchar(30)not null,age int(2)not null,gender varchar(6)not
null,mobile number bigint(10)not null,doctorid int(12) not null,department varchar(40))")
# create table for treatment price
mycursor.execute("create table if not exists treatment_price(symptoms varchar(20)not null,price float(10)not null)")
obj.commit()
# for admin
def admin():
    n="n"
    while n=="n":
      print(" ")
      print("*"*15,"WELCOME TO ADMIN SECTION","*"*15)
      print("
                    ----")
      print("
                         press 1 for ADD PATIENTS:
                                                        |")
     print("
                         .....")
                          press 2 for ADD STAFF:
      print("
                                                      |")
                         ----")
      print("
                    | press 3 for DISPLAY PATIENTS RECORD: |")
      print("
      print("
      print("
                       press 4 for DISPLAY STAFF RECORD: |")
      print("
                     -----")
                         press 5 for CHANGE PASSWORD:
                                                            |")
      print("
                        -----")
      print("
                         press 6 for REMOVE PATIENTS:
      print("
                                                           |")
      print("
                         press 7 for REMOVE STAFF:
      print("
      print("
                         .______")
      print("
                         press 8 for UPDATE PATIENT:
                                                         |")
                         -----")
      print("
                         press 9 for UPDATE STAFF
      print("
                                                         |")
                         -----")
      print("
                         press 10 for ADD DOCTOR
      print("
                                                        |")
      print("
      print("
                         press 11 for REMOVE DOCTOR
                                                         |")
      print("
                        -----")
      print("
                     press 12 for Approval required
                                                        |")
                         -----")
      print("
                     press 13 for LOGOUT:
      print("
      print("
                     ----")
     choice=int(input())
     if choice==1:
        addpatients()
      elif choice==2:
        addstaff()
      elif choice==3:
        patientsrecord()
      elif choice==4:
        staffrecord()
      elif choice==5:
        changepassword()
      elif choice==6:
        removepatients()
```

```
elif choice==7:
         removestaff()
       elif choice==8:
         update_patient()
       elif choice==9:
         update_staff()
       elif choice==10:
         add doctor()
       elif choice==11:
         removedoctor()
       elif choice==12:
         Approvalrequired()
       elif choice==13:
         front()
       else:
         print("!"*15,"INVALID CHOICE","!"*15)
# for add patients
def addpatients():
  y="y"
  while y=="y":
     p=0
     print("*"*17,"ENTER PATIENT DETAILS","*"*17)
     patientname=input("enter patient name:")
     for item in patientname:
        if item.isdigit()==True:
          p=p+1
        else:
           pass
     if p==0:
          age=input("enter patient age:")
          if age.isdigit()!=True:
              print("\n!!!!!!!!!!!!invalid age!!!!!!!!!!!")
              print("
                               please try again
              addpatients()
                                                                                                                      Δctiv/a
     else:
        print("\n!!!!!!!!!!!NVALID NAME!!!!!!!!!!")
        print("
                         please try again
        print("")
        addpatients()
        return
     print("*"*13,"select your gender","*"*13)
     print("if patient is male then press 1")
     print("if patient is female then press 2")
     choice=int(input())
     if choice==1:
        gender="male"
        pass
     elif choice==2:
        gender="female"
        pass
```

```
else:
  print("!"*15,"INVALID CHOICE","!"*15)
  addpatients()
  return
phnumber=input("enter the patient 10 digit phone number:")
if len(phnumber)==10:
  if phnumber.isalpha():
     print("invalid mobile number")
  else:
     if phnumber.isdigit()!=True:
                 print("!"*15,"invalid mobile number","!"*15)
                 addpatients()
     else:
        if phnumber.startswith("0"):
          print("!"*13,"mobile number can not start with 0","!"*13)
        else:
          print("*"*15,"enter patient problem","*"*15)
          print("1. eye problem")
          print("2. ear problem")
          print("3. nose problem")
          print("4. throat problem")
          print("5. hormones problem")
          print("6. mouth problem")
          print("7. any surgiical")
          print("8. bone problem")
          print("9. sugar patient")
          print("10. Skin problem")
          print("11. child problem")
          print("12. other problem")
          ch=int(input("enter the choice:"))
          if ch==1:
             q="eye problem"
             pass
          elif ch==2:
             q="ear problem"
             pass
          elif ch==3:
             q="nose problem"
             pass
          elif ch==4:
             q="throat problem"
             pass
```

```
elif ch==5:
   q="hormones problem"
  pass
elif ch==6:
   q="mouth problem"
   pass
elif ch==7:
  q="surgiical problem"
   pass
elif ch==8:
   q="bone problem"
  pass
elif ch==9:
   q="sugar problem"
  pass
elif ch==10:
   q="Skin problem"
   pass
elif ch==11:
   q="child problem"
   pass
elif ch==12:
  q="other problem"
  pass
else:
  print("invalid choice")
  addpatients()
a="insert into patient values({},'{}',{},'{},',{},'{}')".format('patientid=patientid+100',patientname,
                                      age,gender,phnumber,"curdate()",q)
mycursor.execute(a)
patientid="select patientid from patient where pname='{}' and page={}".format(patientname,age)
mycursor.execute(patientid)
patientid=mycursor.fetchall()
print("\n********patient add SUCCESSFUL and patient id is",patientid[0][0],"********")
obj.commit()
```

```
y=input("Do you want to add more patient(y/n):")
                if y=="y":
                  addpatients()
                else:
                  admin()
      else:
                  print("\n!!!!!!!!!!!invalid phone number!!!!!!!!!!")
                  print("
                                 please try again
      obj.commit()
# for add staff
def addstaff():
  y="y"
  while y=="y":
     p=0
     print("*"*17,"ENTER STAFF DETAILS","*"*17)
     staffname=input("enter the staff name:")
     for item in staffname:
        if item.isdigit()==True:
           p=p+1
        else:
            pass
     if p==0:
        staffage=input("enter the age of staff:")
        if staffage.isdigit()!=True:
           print("!"*17,"invalid AGE","!"*17)
           print("
                             please try again
           addstaff()
```

```
else:
  print("*"*13,"select gender","*"*13)
  print("if staff is male then press 1")
  print("if staff is female the press 2")
  choice=int(input())
  if choice==1:
     gender="male"
     pass
  elif choice==2:
     gender="female"
     pass
  else:
     print("!"*15,"INVALID CHOICE","!"*15)
     addstaff()
     return
  staffphnumber=input("enter the staff phone number:")
  if len(staffphnumber)==10:
      if staffphnumber.isalpha():
         print("!"*15,"invalid mobile number","!"*15)
         addstaff()
      else:
        if staffphnumber.isdigit()!=True:
              print("!"*15,"invalid mobile number","!"*15)
              addstaff()
        else:
            if staffphnumber.startswith("0"):
                         print("!"*13,"mobile number can not start with 0","!"*13)
            else:
               salary=input("enter the salary")
               if salary.isdigit()!=True:
                       print("!"*15,"INVALID SALARY","!"*15)
                       addstaff()
               else:
                  a="insert into staff values({},'{}',{},{},{})".format('staffid=staffid+100',
                                                        staffname, staffage, gender,
                                                        staffphnumber,"curdate()",
                                                        salary)
                  mycursor.execute(a)
                  staffid="select staffid from staff where staffname='{}' and staffage={}".format(staffname,
                                                                   staffage)
```

```
mycursor.execute(staffid)
                            staffid=mycursor.fetchall()
                            print("\n*******STAFF add SUCCESSFUL and STAFF ID is", staffid[0][0], "********")
                            obj.commit()
                            y=input("Do you want to add more staff(y/n):")
                            if y=="y":
                              addstaff()
                            else:
                              admin()
             else:
               print("!"*17,"invalid PHONE NUMBER","!"*17)
               print("
                               please try again
               addstaff()
        else:
           print("!"*17,"invalid NAME","!"*17)
           print("
                           please try again
           addstaff()
           return
# for patient record
def patientsrecord():
  y="y"
  while y=="y":
        pid=input("enter patient ID:")
        if pid.isdigit()!=True:
             print("!"*15,"INVALID ID","!"*15)
        else:
             a="select patientid from patient where patientid={}".format(pid)
             mycursor.execute(a)
              b=mycursor.fetchall()
             if len(b)<1:
                a="select patientid from patientrecord where patientid={}".format(pid)
                mycursor.execute(a)
                b=mycursor.fetchall()
                if len(b)<1:
                   print("!"*17,"INVALID PATIENT ID","!"*17)
                   print("OR".center(50))
                                                                                                        8
```

```
print("!"*12," if ID is incorrect, please try again","!"*12)
  else:
     result="select * from patientrecord where patientid={}".format(pid)
     mycursor.execute(result)
     result1=mycursor.fetchall()
     print("*"*12,"PATIENT DETAILS ARE GIVEN BELOW:","*"*12)
     print("\n
                    patient id is:",result1[0][0])
     print("\n
                    patient name is:",result1[0][1])
                    patient age is:",result1[0][2])
     print("\n
     print("\n
                    patient gender is:",result1[0][3])
     print("\n
                    patient phone number is:",result1[0][4])
                    patient admit date:",result1[0][5])
     print("\n
                    patient discharge date:",result1[0][6])
     print("\n
     y=input("Do you want more patient record(y/n):")
else:
  result="select * from patient where patientid={}".format(pid)
  mycursor.execute(result)
  result1=mycursor.fetchall()
  print("*"*12,"PATIENT DETAILS ARE GIVEN BELOW:","*"*12)
  print("\n
                  patient id is:",result1[0][0])
                  patient name is:",result1[0][1])
  print("\n
                  patient age is:",result1[0][2])
  print("\n
                  patient gender is:",result1[0][3])
  print("\n
                  patient problem:",result1[0][6])
  print("\n
  print("\n
                  patient phone number is:",result1[0][4])
  print("\n
                  patient admit date:",result1[0][5])
  y=input("Do you want more patient record(y/n):")
```

```
# for staff record
def staffrecord():
  y="y"
  while y=="y":
       sid=input("enter staff ID:")
       if sid.isdigit()!=True:
             print("!"*15,"INVALID ID","!"*15)
       else:
             a="select staffid from staff where staffid={}".format(sid)
             mycursor.execute(a)
             b=mycursor.fetchall()
             if len(b)<1:
                a="select staffid from staffrecord where staffid={}".format(sid)
                mycursor.execute(a)
                b=mycursor.fetchall()
                if len(b)<1:
                  print("!"*17,"INVALID PATIENT ID","!"*17)
                  print("OR".center(50))
                  print("*"*12,"CHECK IN PRESENT STAFF RECORD","*"*12)
                  print("!"*12," if ID is incorrect, please try again","!"*12)
                else:
                  result="select * from staffrecord where staffid={}".format(sid)
                  mycursor.execute(result)
                  result1=mycursor.fetchall()
                  print("*"*12,"STAFF DETAILS ARE GIVEN BELOW:","*"*12)
                                  staff id is:",result1[0][0])
                  print("\n
                                 staff name is:",result1[0][1])
                  print("\n
                                 ataff age is:",result1[0][2])
                  print("\n
                                 staff gender is:",result1[0][3])
                  print("\n
                  print("\n
                                 staff phone number is:",result1[0][4])
                  print("\n
                                 staff date of joining:",result1[0][5])
                                 staff salary: Rs",result1[0][6])
                  print("\n
                  print("\n
                                  staff total working day:",result1[0][7])
                  y=input("Do you want more staff record(y/n):")
```

```
else:
            result="select * from staff where staffid={}".format(sid)
            mycursor.execute(result)
            result1=mycursor.fetchall()
            print("*"*12,"STAFF DETAILS ARE GIVEN BELOW:","*"*12)
                          staff id is:",result1[0][0])
            print("\n
            print("\n
                          staff name is:",result1[0][1])
            print("\n
                          ataff age is:",result1[0][2])
            print("\n staff gender is:",result1[0][3])
            print("\n staff phone number is:",result1[0][4])
            print("\n staff date of joining:",result1[0][5])
                          staff salary: Rs",result1[0][6])
            print("\n
            y=input("Do you want more staff record(y/n):")
# for change password
def changepassword():
  old=input("enter the old password:")
  password1="select * from password"
  mycursor.execute(password1)
  password2=mycursor.fetchall()
  if old==password2[0][0]:
     new=input("enter the new password:")
     new1=input("re-enter the new password:")
     if new==new1:
       a="insert into password values('{}')".format(new1)
       mycursor.execute(a)
       b="delete from password where password='{}".format(old)
       mycursor.execute(b)
       obj.commit()
       print("*"*17,"PASSWORD CHANGE SUCCESSFUL","*"*17)
  else:
     print("\n********INCORRECT PASSWORD!!!***********
              ************TRY AGAIN*********************************
     print("
```

```
# for remove patient from hospital
def removepatients():
  y="y"
  while y=="y":
     ID=int(input("enter patient id "))
     a="select * from patient where patientid={} ".format(ID)
     mycursor.execute(a)
     result1=mycursor.fetchall()
    if len(result1)<1:
       b="select * from patientrecord where patientid={}".format(ID)
       mycursor.execute(b)
       result2=mycursor.fetchall()
       if len(result2)<1:
            print("\n#######PATIENT ID ARE NOT CORRECT!!!!########")
       else:
          print("#########PATIENT IS ALREADY REMOVE!!!!!##########")
         admin()
     else:
       print("Do you confirm remove this", ID, "if yes press(y) else press any key except(y)):")
       ch=input("")
       if ch=="y":
          b="select * from patient where patientid={}".format(ID)
          mycursor.execute(b)
          result2=mycursor.fetchall()
          pname=result2[0][1]
          page=result2[0][2]
          pgender=result2[0][3]
          phoneno=result2[0][4]
          admitdate=result2[0][5]
          admitdate=str(admitdate)
          admitdate=admitdate.replace("-","")
          patientrecord="insert into patientrecord values({},'{}',{},'{},'{},'{},'{})".format(ID,pname,
                            page,pgender,phoneno,admitdate,"curdate()")
          mycursor.execute(patientrecord)
```

```
deletepatient="delete from patient where patientid={}".format(ID)
          mycursor.execute(deletepatient)
          print("\n*******DISCHARGE SUCCESSFUL************")
          obj.commit()
          y=input("Do you want more remove patient(y/n):")
       else:
          admin()
# for Remove staff
def removestaff():
  y="y"
  while y=="y":
    ID=int(input("enter staff id "))
    a="select * from staff where staffid={} ".format(ID)
    mycursor.execute(a)
    result1=mycursor.fetchall()
    if len(result1)<1:
      b="select * from staffrecord where staffid={}".format(ID)
      mycursor.execute(b)
      result2=mycursor.fetchall()
      if len(result2)<1:
           print("\n########STAFF ID ARE NOT CORRECT!!!!#######")
       else:
           print("##########STAFF IS ALREADY REMOVE!!!!!######### ")
    else:
      print("Do you confirm remove this", ID, "if yes press(y) else press any key except(y)):")
      ch=input("")
```

```
if ch=="y":
            b="select * from staff where staffid={}".format(ID)
            mycursor.execute(b)
            result2=mycursor.fetchall()
            staffname=result2[0][1]
            staffage=result2[0][2]
            staffgender=result2[0][3]
            staffphoneno=result2[0][4]
            staffjoingdate=result2[0][5]
            staffjoingdate=str(staffjoingdate)
            staffjoingdate=staffjoingdate.replace("-","")
            salary=result2[0][6]
            staffrecord="insert into staffrecord values({},'{}',{},{},{},{},{})".format(ID,staffname,staffage,
                                              staffgender, staffphoneno, staffjoingdate, salary, "curdate()")
            mycursor.execute(staffrecord)
            deletestaff="delete from staff where staffid={}".format(ID)
            mycursor.execute(deletestaff)
            print("\n*******REMOVE SUCCESSFUL***********")
            obj.commit()
            y=input("Do you want more remove patient(y/n):")
       else:
          admin()
# for update patient information
def update_patient():
  y="y"
  while y=="y":
          ID=input("enter patient ID :")
          if ID.isdigit()!=True:
               print("!"*15,"INVALID ID","!"*15)
          else:
               a="select * from patient where patientid={} ".format(ID)
               mycursor.execute(a)
               result1=mycursor.fetchall()
               if len(result1)<1:
                    print("\n#######PATIENT ID ARE NOT CORRECT!!!!########")
                                     please try again
                                                                                                    14
```

else:

```
print("what do you want to update??")
print("press 1 for update patient name")
print("press 2 for update patient age")
print("press 3 for update patient gender")
print("press 4 for update patient phone number")
ch=int(input(""))
if ch==1:
  update_patient_name(ID)
elif ch==2:
  update_patient_age(ID)
elif ch==3:
     print("if patient is male then press 1")
     print("if patient is female then press 2")
     choice=int(input())
     if choice==1:
       update patient male(ID)
     elif choice==2:
       update patient female(ID)
     else:
       print("!"*15,"INVALID CHOICE","!"*15)
elif ch==4:
   update_patient_phone_number(ID)
else:
   print("!"*15,"INVALID CHOICE","!"*15)
y=input("Do you want to update the details of more patients??(y/n):")
```

```
# for update patient name
def update_patient_name(ID):
       p=0
       name=input("enter patient name:")
       for item in name:
            if item.isdigit()==True:
               p=p+1
            else:
               pass
       if p==0:
            up="update patient set pname='{}' where patientid={}".format(name,ID)
            mycursor.execute(up)
            obj.commit()
            print("*"*15,"PATIENT NAME UPDATE SUCCESSFUL","*"*15)
            y=input("Do you want to update the name of more patient??(y/n):")
            if y=="y":
               update_patient()
            else:
                 admin()
       else:
          print("!"*15,"INVALID NAME","!"*15)
# for update patient age
def update_patient_age(ID):
        age=input("enter patient age:")
        if age.isdigit()!=True:
           print("!"*15,"INVALID AGE","!"*15)
           update_patient_age(ID)
        else:
          up="update patient set page={} where patientid={}".format(age,ID)
          mycursor.execute(up)
          obj.commit()
          print("*"*15,"PATIENT AGE UPDATE SUCCESSFUL","*"*15)
          y=input("Do you want to update the age of more patient??(y/n):")
          if y=="y":
             update_patient()
          else:
             admin()
                                                                                         16
```

```
# for update patient gender if male
def update patient male(ID):
        gender="male"
        up="update patient set pgender='{}' where patientid={}".format(gender,ID)
        mycursor.execute(up)
        obj.commit()
        print("*"*15,"PATIENT GENDER UPDATE SUCCESSFUL","*"*15)
        y=input("Do you want to update the gender of more patient??(y/n):")
        if y=="y":
         update patient()
        else:
             admin()
# for update patient gender if female
def update_patient_female(ID):
        gender="female"
        up="update patient set pgender='{}' where patientid={}".format(gender,ID)
        mycursor.execute(up)
        obj.commit()
        print("*"*15,"PATIENT GENDER UPDATE SUCCESSFUL","*"*15)
        y=input("Do you want to update the gender of more patient??(y/n):")
        if y=="y":
         update patient()
        else:
             admin()
```

```
# for update patient phone number
def update_patient_phone_number(ID):
          phone=input("enter the patient 10 digit phone number:")
          if len(phone)==10:
                 if phone.isalpha():
                        print("invalid mobile number")
                        update patient phone number(ID)
                 else:
                   if phone.isdigit()!=True:
                          print("!"*15,"invalid mobile number","!"*15)
                          update_patient_phone_number(ID)
                   else:
                      if phone.startswith("0"):
                        print("!"*13,"mobile number can not start with 0","!"*13)
                        update patient phone number(ID)
                      else:
                        up="update patient set phoneno={} where patientid={}".format(phone,ID)
                        mycursor.execute(up)
                        obj.commit()
                        print("*"*15,"PATIENT PHONE NUMBER UPDATE SUCCESSFUL","*"*15)
                        y=input("Do you want to update the gender of more patient??(y/n):")
                        if y=="y":
                           update_patient()
                        else:
                             admin()
          else:
            print("!"*15,"INVALID PHONE NUMBER","!"*15)
            update patient phone number(ID)
```

```
# for update staff information
def update staff():
  y="y"
  while y=="y":
          ID=input("enter staff id:")
          if ID.isdigit()!=True:
               print("!"*15,"INVALID ID","!"*15)
          else:
               a="select * from staff where staffid={} ".format(ID)
               mycursor.execute(a)
               result1=mycursor.fetchall()
               if len(result1)<1:
                    print("\n########SATFF ID ARE NOT CORRECT!!!!########")
                                    please try again
               else:
                    print("what do you want to update??")
                    print("press 1 for update staff name")
                    print("press 2 for update staff age")
                    print("press 3 for update staff gender")
                    print("press 4 for update staff phone number")
                    print("press 5 for update staff salary")
                    ch=int(input(""))
                    if ch==1:
                       update staff name(ID)
                    elif ch==2:
                       update_staff_age(ID)
                    elif ch==3:
                         print("if staff is male then press 1")
                         print("if staff is female then press 2")
                         choice=int(input())
                         if choice==1:
                                update_staff_male(ID)
                          elif choice==2:
                                update_staff_female(ID)
                          else:
                            print("!"*15,"INVALID CHOICE","!"*15)
                            print("!"*15,"TRY AGAIN","!"*15)
```

```
elif ch==4:
                   update staff phone(ID)
                elif ch==5:
                   update staff salary (ID)
                else:
                   print("!"*15,"INVALID CHOICE","!"*15)
                   print("!"*15,"TRY AGAIN","!"*15)
# for update staff name
def update_staff_name(ID):
       p=0
       name=input("enter staff name:")
       for item in name:
            if item.isdigit()==True:
              p=p+1
            else:
               pass
       if p==0:
         up="update staff set staffname='{}' where staffid={}".format(name,ID)
         mycursor.execute(up)
         obj.commit()
         print("*"*15,"STAFF NAME UPDATE SUCCESSFUL","*"*15)
         y=input("Do you want to update the details of more staff??(y/n):")
         if y=="y":
            update_staff()
         else:
               admin()
       else:
         print("!"*15,"INVALID NAME","!"*15)
         print("!"*15,"TRY AGAIN","!"*15)
         update_staff_name(ID)
```

```
# for update staff age
def update staff age(ID):
       age=input("enter staff age:")
       if age.isdigit()!=True:
          print("!"*15,"INVALID AGE","!"*15)
          print("!"*15,"TRY AGAIN","!"*15)
          update_staff_age(ID)
       else:
          up="update staff set staffage={} where staffid={}".format(age,ID)
          mycursor.execute(up)
          obj.commit()
          print("*"*15,"STAFF AGE UPDATE SUCCESSFUL","*"*15)
          y=input("Do you want to update the age of more staff??(y/n):")
          if y=="y":
            update_staff()
          else:
               admin()
# for update staff gender if male
def update staff male(ID):
            gender="male"
            up="update staff set staffgender='{}' where staffid={}".format(gender,ID)
            mycursor.execute(up)
            obj.commit()
            print("*"*15,"STAFF GENDER UPDATE SUCCESSFUL","*"*15)
            y=input("Do you want to update the details of more staff??(y/n):")
            if y=="y":
               update staff()
            else:
                  admin()
```

```
# for update staff gender if female
def update_staff_female(ID):
           gender="female"
           up="update staff set staffgender='{}' where staffid={}".format(gender,ID)
           mycursor.execute(up)
           obj.commit()
           print("*"*15,"STAFF GENDER UPDATE SUCCESSFUL","*"*15)
          y=input("Do you want to update the details of more staff??(y/n):")
          if y=="y":
             update_staff()
           else:
                admin()
# for update staff phone number
def update_staff_phone(ID):
         phone=input("enter the staff 10 digit phone number:")
         if len(phone)==10:
              if phone.isalpha():
                        print("invalid mobile number")
                        update staff phone(ID)
              else:
                   if phone.isdigit()!=True:
                         print("!"*15,"invalid mobile number","!"*15)
                         update_staff_phone(ID)
                   else:
                     if phone.startswith("0"):
                        print("!"*13,"mobile number can not start with 0","!"*13)
                        update_staff_phone(ID)
                     else:
                          up="update staff set staffphoneno={} where staffid={}".format(phone,ID)
                          mycursor.execute(up)
                          obj.commit()
                          print("*"*15,"STAFF PHONE NUMBER UPDATE SUCCESSFUL"."*"*15)
                          y=input("Do you want to update the details of more staff??(y/n):")
```

```
if y=="y":
                            update_staff()
                       else:
                            admin()
       else:
         print("!"*15,"INVALID PHONE NUMBER","!"*15)
         print("!"*15,"TRY AGAIN","!"*15)
         update_staff_phone(ID)
# for update staff salary
def update staff salary(ID):
     salary= input("enter the salary")
     if salary.isdigit()!=True:
          print("!"*15,"INVALID SALARY","!"*15)
          update staff salary(ID)
     else:
          up="update staff set salary={} where staffid={}".format(salary,ID)
          mycursor.execute(up)
          obj.commit()
          print("*"*15,"SALARY UPDATE SUCCESSFUL","*"*15)
          y=input("Do you want to update the details of more staff??(y/n):")
          if y=="y":
             update staff()
          else:
               admin()
```

```
# for add doctor
def add doctor():
  p=0
  print("*"*15," ENTER DOCTOR DETAILS","*"*15)
  name=input("enter doctor name:")
  for item in name:
       if item.isdigit()==True:
          p=p+1
       else:
           pass
  if p==0:
          department=input("enter the department:")
          for item in department:
               if item.isdigit()==True:
                    p=p+1
               else:
                    pass
          if p==0:
               print("if doctor is male then press 1")
               print("if doctor is female then press 2")
               choice=int(input())
               if choice==1:
                    gender="male"
                    pass
               elif choice==2:
                    gender="female"
                    pass
               else:
                  print("!"*13,"invalid choice","!"*13)
                  add doctor()
               work_experience=input("enter the workexperience(in year):")
               if work_experience.isdigit()==True:
                    phone_number=input("enter the patient 10 digit phone number:")
                    if len(phone number)==10:
                         if phone_number.isalpha():
                               print("invalid mobile number")
                               add doctor()
                                                                                         24
```

```
else:
                 if phone_number.isdigit()!=True:
                        print("!"*15,"invalid mobile number","!"*15)
                        add doctor()
                 else:
                    if phone number.startswith("0"):
                      print("!"*13,"mobile number can not start with 0","!"*13)
                      add doctor()
                    else:
                      salary=input("enter salary:")
                      if salary.isdigit()==True:
                         a="insert into doctor values({},'{}','{}','{}',{},{},{},{})".
                         format('null',name,department,gender,work_experience,
                              phone_number,"curdate()",salary)
                         mycursor.execute(a)
                         obj.commit()
                         doctorid="""select doctorid from doctor where doctorname='{}'
                         and department='{}""".format(name.department)
                         mycursor.execute(doctorid)
                         doctorid=mycursor.fetchall()
                         print("*"*15,"DOCTOR ADD SUCCESSFUL AND DOCTOR ID ",doctorid[0][0],"*"*15)
                       else:
                         print("\n!!!!!!!!!!invalid salary!!!!!!!!!!")
                         print("
                                       please try again
                         add_doctor()
      else:
            print("!"*15,"invalid mobile number","!"*15)
           add_doctor()
else:
      print("\n!!!!!!!!!!!invalid work experience!!!!!!!!!!!!")
      print("
                         please try again
      add_doctor()
```

```
else:
               print("\n!!!!!!!!!!!invalid department!!!!!!!!!")
                                please try again
               print("
               add_doctor()
  else:
       print("!"*15,"invalid name","!"*15)
       add doctor()
# for Remove doctor
def removedoctor():
  y="y"
  while y=="y":
    ID=int(input("enter doctor id "))
    a="select * from doctor where doctorid={} ".format(ID)
    mycursor.execute(a)
    result1=mycursor.fetchall()
    if len(result1)<1:
         b="select * from doctorrecord where doctorid={}".format(ID)
         mycursor.execute(b)
         result2=mycursor.fetchall()
         if len(result2)<1:
              print("\n########DOCTOR ID ARE NOT CORRECT!!!!########")
          else:
              print("######### DOCTOR IS ALREADY REMOVE!!!!!######### ")
     else:
      print("Do you confirm remove this",ID,"if yes press(y) else press any key except(y)):")
      ch=input("")
```

```
if ch=="y":
        b="select * from doctor where doctorid={}".format(ID)
        mycursor.execute(b)
        result2=mycursor.fetchall()
        doctorname=result2[0][1]
        dateofjoinig=result2[0][6]
        dateofjoinig=str(dateofjoinig)
        dateofjoinig=dateofjoinig.replace("-","")
        department=result2[0][2]
        gender=result2[0][3]
        phone_number=result2[0][5]
        doctorrecord="insert into doctorrecord values({},'{}','{}','{}',{},,{},)".format(ID,doctorname,department,gender,
                                                       phone_number,dateofjoinig,"curdate()")
        mycursor.execute(doctorrecord)
        deletedoctor="delete from doctor where doctorid={}".format(ID)
        mycursor.execute(deletedoctor)
        print("\n********REMOVE SUCCESSFUL***********")
        obj.commit()
        y=input("Do you want more remove patient(y/n):")
       else:
             admin()
# for check how many doctor apply for job and for approval
def Approvalrequired():
  a="select count(*) from job where status='{}"".format('HOLD')
  mycursor.execute(a)
  b=mycursor.fetchall()
  print("Total number of approval required:",b[0][0])
  if b[0][0]<1:
        return
        print("end")
  else:
     c="select * from job where status='{}".format('HOLD')
```

```
mycursor.execute(c)
c=mycursor.fetchall()
print("*"*15,"Details of Doctor who are apply for job","*"*15)
for i in c:
   print("apply ID:",i[0])
   print("apply date:",i[1])
   print("Dr. name:",i[2])
   print("Department:",i[3])
   print("work experience in this department:",i[4])
   print("Gender:",i[5])
   print("")
print("press 1 for approve the doctor")
print("press 2 for reject the doctor")
ch=int(input(""))
if ch==1:
     ID=int(input("enter the apply ID:"))
     b="select * from job where apply_id={}".format(ID)
     mycursor.execute(b)
     b=mycursor.fetchall()
     if len(b)<1:
        print("!"*15,"INVALID APPLY ID","!"*15)
        Approvalrequired()
     else:
           select="select apply_id from job where status='{}".format("HOLD")
           mycursor.execute(select)
           select=mycursor.fetchall()
           if select[0][0]==ID:
                 c="select * from job where apply_id={}".format(ID)
                 mycursor.execute(c)
                 c=mycursor.fetchall()
                 d="select salary from salary where department='{}".format(c[0][3])
                 mycursor.execute(d)
                 d=mycursor.fetchall()
                 e="insert into doctor values({},'{}','{}',{},{},{},{})".format("null",c[0][2],c[0][3],c[0][5],
                                                            c[0][4],c[0][6],"curdate()",
                                                            d[0][0]
                 mycursor.execute(e)
                 obj.commit()
                 f="update job set status='{}' where apply_id={}".format('APPROVED',ID)
                 mycursor.execute(f)
                                                                                             28
```

```
obj.commit()
                print("*"*15,"APPROVED SUCCESSFUL","*"*15)
          else:
               select1="select status from job where apply_id={}".format(ID)
               mycursor.execute(select1)
               select1=mycursor.fetchall()
               print("#"*13,"Doctor is already",select1[0][0],"#"*13)
elif ch==2:
     ID=int(input("enter the apply ID which you want reject:"))
     b="select apply_id from job where apply_id={}".format(ID)
     mycursor.execute(b)
     b=mycursor.fetchall()
     if len(b)<1:
       print("!"*15,"INVALID APPLY ID","!"*15)
     else:
          select="select apply_id from job where status='{}".format("HOLD")
          mycursor.execute(select)
          select=mycursor.fetchall()
          if select[0][0]==ID:
               reject="update job set status='{}' where apply_id={}".format('REJECTED',ID)
               mycursor.execute(reject)
               obj.commit()
               print("*"*15,"REJECT SUCCESSFUL","*"*15)
          else:
               select1="select status from job where apply_id={}".format(ID)
               mycursor.execute(select1)
               select1=mycursor.fetchall()
               print("#"*13,"Doctor is already",select1[0][0],"#"*13)
else:
       print("#"*12,"!"*4,"INVALID CHOICE","!"*4,"#"*12)
       Approvalrequired()
```

```
# for front page design
def front():
    print(" "*10,"*"*70)
    print(" ")
           WELCOME TO ABC HOSPITAL".center(80))
    print("
    print(" ")
    print(" "*10,"*"*70)
    print(" ")
    print("
                   press 1 for ADMIN:
    print("
    print("
                    press 2 for PATIENT: |")
    print("
    print("
                        press 3 For DOCTER: |")
    print("
                    ----")
    print("
    print("
                    press 4 For EXIT:
    print("
    ch=int(input())
    if ch==1:
         password=input("enter the password:")
         password1="select * from password"
         mycursor.execute(password1)
         password2=mycursor.fetchall()
         if password==password2[0][0]:
           admin()
         else:
          print("\n**********INCORRECT PASSWORD!!!*****************")
          print("*************************")
          print("")
          front()
    elif ch==2:
      patient()
    elif ch==3:
      doctor_create()
    elif ch==4:
      print("*"*16,"THANK YOU","*"*16)
      while True:
           break
    else:
       print("INVALID CHOICE")
       front()
```

```
# for patient use
def patient():
  print("*"*15,"WELCOME TO OUR MOBILE APPLICATION","*"*15)
  print("press 1 for book appointment")
  print("press 2 FOR treatment price")
  print("press 3 For back again")
  ch=int(input(""))
  if ch==1:
     appointment()
  elif ch==2:
     treatment_price()
  elif ch==3:
     front()
  else:
     print("!!!!!invalid choice!!!!!\n")
     patient()
# for book appointment for patient
def appointment():
  print("#"*15,"SELECT YOUR PROBLEM!!!","#"*15)
  print("1. For eye problem")
  print("2. For ear problem")
  print("3. For nose problem")
  print("4. For throat problem")
  print("5. For hormones problem")
  print("6. For mouth problem")
  print("7. For any surgiical")
  print("8. For bone problem")
  print("9. For sugar patient")
  print("10. For Skin problem")
  print("11. For child problem")
  print("12. For other problem")
  print("13. for back again")
  ch=input("enter the choice:")
  if ch=="1":
     print("\nThis are the doctor which are specialist in Eye")
     q="Eye"
     app(q)
```

```
elif ch=="2":
  q="ear"
  app(q)
elif ch=="3":
  q="nose"
  app(q)
elif ch=="4":
  q="throat"
  app(q)
elif ch=="5":
  q="hormones"
  app(q)
elif ch=="6":
  q="mouth"
  app(q)
elif ch=="7":
  q="surgiical"
  app(q)
elif ch=="8":
  q="bone"
  app(q)
elif ch=="9":
  q="sugar"
  app(q)
elif ch=="10":
  q="Skin"
  app(q)
elif ch=="11":
  q="child"
  app(q)
elif ch=="12":
  q="other"
  app(q)
elif ch=="13":
  patient()
else:
  print("invalid choice\n")
  appointment()
                                                                                       32
```

```
def app(q):
  a="select department from symptoms and dept where symptoms like'%{}%".format(q)
  mycursor.execute(a)
  b=mycursor.fetchall()
  b=b[0][0] # b is name of department
  #print("department ",b)
  c="select * from doctor where department='{}".format(b)
  mycursor.execute(c)
  c=mycursor.fetchall() # c is list of doctor
  #print("doctor name ",c)
  d=len(c)
  print("There are ",d,"doctor")
  for i in c:
        print("")
        print("doctor id:",i[0])
        print("Doctor name:",i[1])
        print("department:",i[2])
        print("gender:",i[3])
        print("work experience:",i[4])
        print("")
  y="y"
  while y=="y":
     book=input("you want to book appointment(y/n):")
     if book=="y":
        ID=input("\nenter the doctor id:")
       if ID.isdigit():
             e="select * from doctor where doctorid={}".format(ID)
             mycursor.execute(e)
             e=mycursor.fetchall() # e is detail of particular doctor
             #print(e)
             if len(e)<1:
               print("INVALID DOCTOR ID")
               app(q)
             else:
               select="select doctorid from doctor where doctorid like'%{}%".format(ID)
               mycursor.execute(select)
               select=mycursor.fetchall() # select is doctor id
               #print("DOCTOR ID :",select)
```

```
#print(select)
L=[]
for i in select:
     L.append(i[0])
#print(L)
for ID in L:
     0=q
     name=input("enter your name:")
     for item in name:
             if item.isdigit()==True:
                     p=p+1
             else:
                pass
     if p==0:
                age=input("enter patient age:")
                if age.isdigit()!=True:
                  print("\n!!!!!!!!!!!!invalid age!!!!!!!!!!!!")
                  print("
                                    please try again
               else:
                 print("if you are male then press 1")
                 print("if you are female then press 2")
                 choice=int(input())
                 if choice==1:
                    gender="male"
                 else:
                    gender="female"
                    pass
                 mobile_number=input("enter your mobile number:")
                 if len(mobile_number):
                    insert="insert into appointment values('{}',{},'{}',{},'{}')".format(
                                            name,age,gender,mobile_number,ID,b]
                    mycursor.execute(insert)
                    obj.commit()
                    print("\nappointment book SUCCESSFUL")
                    print("")
                    patient()
```

```
else:
                                print("invalid mobile number")
                   else:
                     print("\n!!!!!!!!!!!invalid name!!!!!!!!!!!!")
                     print("
                                    please try again
             # else:
                  # print("\nDoctor of this ID",ID,"is not related to",q,"problem\n")
       else:
            print("INVALID DOCTOR ID")
            app(q)
     elif book=="n":
       patient()
     else:
       print("!"*12,"INVALID CHOICE","!"*12)
       y=input("Do you want to book more appointment(y/n):")
# for treatment price
def treatment price():
   a="select * from treatment price"
   mycursor.execute(a)
   a=mycursor.fetchall()
  for i in a:
     print(" ","--"*28)
     print(" |",i[0],"price are:Rs",i[1],"per treatment|")
   print(" ","--"*28)
   print("")
   ch=input("Do you want to book appointment(y/n):")
   if ch=="y":
     print("asdfg")
     appointment()
   else:
      print("")
      patient()
```

```
# for create account as a doctor
def login():
       print("*"*15,"ENTER THE FOLLOWING DETAILS FOR CREATE THE ACCOUNT","*"*15)
       p=0
       name=input("enter your name:")
       for item in name:
            if item.isdigit()==True:
               p=p+1
            else:
                pass
       if p==0:
               mobile_number=input("enter your mobile number:")
               if len(mobile_number)==10:
                       if mobile_number.isalpha():
                          print("!"*15,"invalid mobile number","!"*15)
                          login()
                       else:
                          if mobile number.isdigit()!=True:
                                print("!"*15,"invalid mobile number","!"*15)
                                login()
                          else:
                               if mobile_number.startswith("0"):
                                           print("!"*13,"mobile number can not start with 0","!"*13)
                               else:
                                 b="select * from login where mobile number={}".format(mobile number)
                                 mycursor.execute(b)
                                 b=mycursor.fetchall()
                                 if len(b)<1:
                                    new=input("enter password")
                                    new1=input("re-enter your password")
                                    if new==new1:
                                      a="insert into login values ('{}',{},'{}')".format(name,mobile_number,
                                                                      new1)
                                      mycursor.execute(a)
                                      obj.commit()
                                      print("*"*15,"ACCOUNT CREATED ","*"*15)
                                      login1()
                                    else:
                                      print("password is not match")
                                      login()
```

```
else:
                                      print("account already exists")
             else:
                   print("invalid mobile number")
                  login()
     else:
             print("\n!!!!!!!!!!!!invalid name!!!!!!!!!!!")
             print("
                               please try again
             login()
# for doctor login
def login1():
  mobile_number= input("enter mobile number:")
  #mobile_number=str(mobile_number)
  if len(mobile_number)==10:
       if mobile_number.isalpha():
             print("!"*15,"invalid mobile number","!"*15)
            print("")
            login1()
       else:
          if mobile number.isdigit()!=True:
               print("!"*15,"invalid mobile number","!"*15)
               print("")
               login1()
          else:
               if mobile_number.startswith("0"):
                    print("!"*13,"mobile number can not start with 0","!"*13)
                    print("")
                    login1()
               else:
                    a="select * from login where mobile_number={}".format(mobile_number)
                    mycursor.execute(a)
                    a=mycursor.fetchall()
                    if len(a)<1:
                       print("*"*16,"ACCOUNT DOES NOT EXEST","*"*16)
                       print("")
                       print("#"*16,"CREATE ACCOUNT","#"*16)
                       login()
                    else:
                       password=input("enter password")
                       b="select * from login where password='{}".format(password)
```

```
mycursor.execute(b)
                      b=mycursor.fetchall()
                      if len(b)<1:
                             print("*"*16,"INCORRECT PASSWORD","*"*16)
                             print("")
                             login1()
                      else:
                         doctor(mobile_number)
   else:
      print("*"*14,"INVALID MOBILE NUMBER","*"*14)
      print("")
      login1()
# for login to doctor section
def doctor_create():
  print("press 1 for create account")
  print("press 2 for login")
  print("press 3 for back")
  choice=int(input(""))
  if choice==1:
     login()
  elif choice==2:
     login1()
  elif choice==3:
        front()
  else:
        print("*"*12,"INVALID CHOICE!!!","*"*12)
        print("")
        doctor create()
# for doctor section
def doctor(mobile_number):
  print("*"*15,"WELCOME TO DOCTOR SECTION","*"*15)
  print("press 1 for apply job")
  print("press 2 for view appointment")
  print("press 3 for view salary department wise")
  print("press 4 for exit")
  ch=int(input(""))
  if ch==1:
     apply_job(mobile_number)
  elif ch==2:
     view_appointment(mobile_number)
                                                                                            38
```

```
elif ch==3:
     salary()
  elif ch==4:
        doctor_create()
  else:
        print("*"*12,"INVALID CHOICE!!!","*"*12)
        print("")
        doctor(mobile_number)
# for apply job as a doctor
def apply job(mobile number):
  select="select * from doctor where phone_number={}".format(mobile_number)
  mycursor.execute(select)
  select=mycursor.fetchall()
  if len(select)<1:
            name=input("enter your name")
            p=0
            for item in name:
                 if item.isdigit()==True:
                    p=p+1
                 else:
                     pass
            if p==0:
                    print("*"*15,"SELECT YOUR DEPARTMENT","*"*15)
                    print("1.Medicine")
                    print("2.Eye")
                    print("3.Gynecology")
                    print("4.Dental")
                    print("5.surgiical")
                    print("6.Orthopedic")
                    print("7.ENT")
                    print("8.Diabetic")
                    print("9.Child")
                    print("10.Skin")
                    ch=int(input("enter your choice:"))
                    if ch==1:
                       department="Medicine"
                    elif ch==2:
                       department="Eye"
```

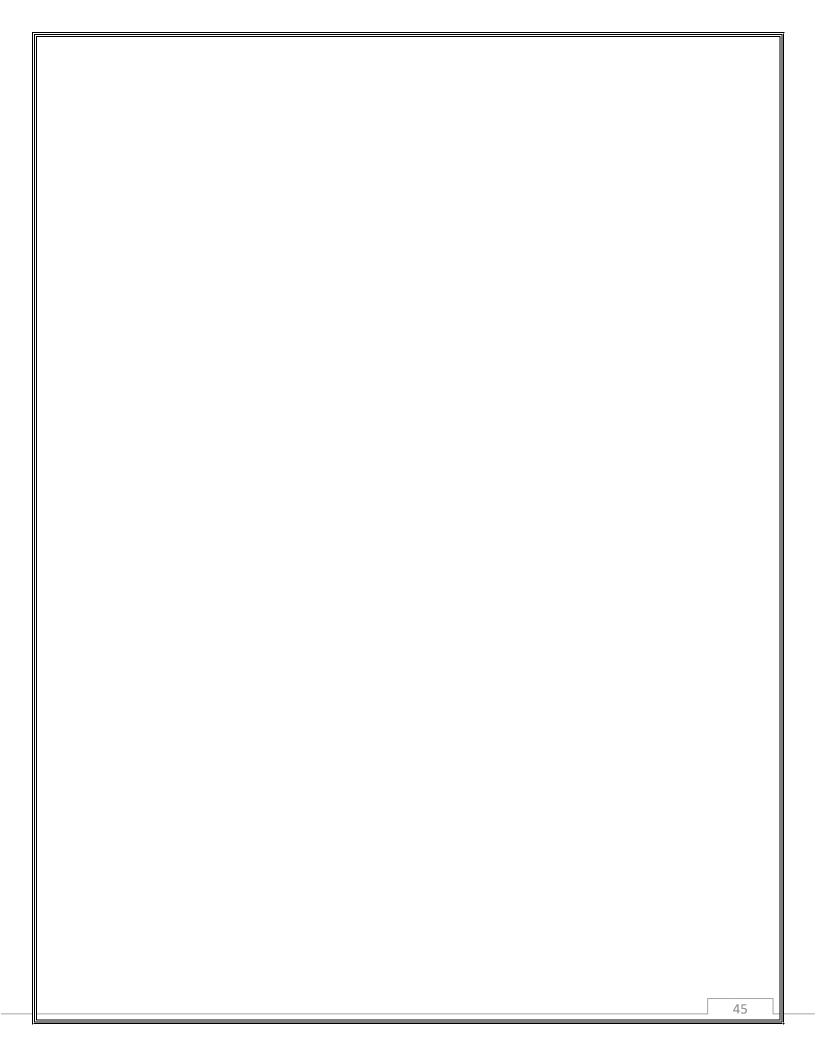
```
elif ch==3:
  department="Gynecology"
elif ch==4:
  department="Dental"
elif ch==5:
  department="surgiical"
elif ch==6:
  department="Orthopedic"
elif ch==7:
  department="ENT"
elif ch==8:
  department="Diabetic"
elif ch==9:
  department="Child"
elif ch==10:
  department="Skin"
else:
  print("!"*15,"INVALID CHOICE","!"*15)
  apply_job(mobile_number)
  pass
work_experience=input("enter your work experience in this field (like year,month) ")
if work_experience.isalnum():
  print("if you are male then press 1")
  print("if you are female the press 2")
  choice=int(input())
  if choice==1:
     gender="male"
     pass
  elif choice==2:
     gender="female"
     pass
  else:
       print("!"*15,"INVALID CHOICE","!"*15)
       apply_job(mobile_number)
  #phone number="select * from login where mobile number={}".format(mobile number)
  if len(mobile_number)==10:
     a="insert into job values({},{},'{}','{}',{},'{}')".format('apply_id=apply_id+1000',
                                              "curdate()",name,
                                              department, work_experience,
                                              gender, mobile_number,
                                              'HOLD')
     mycursor.execute(a)
```

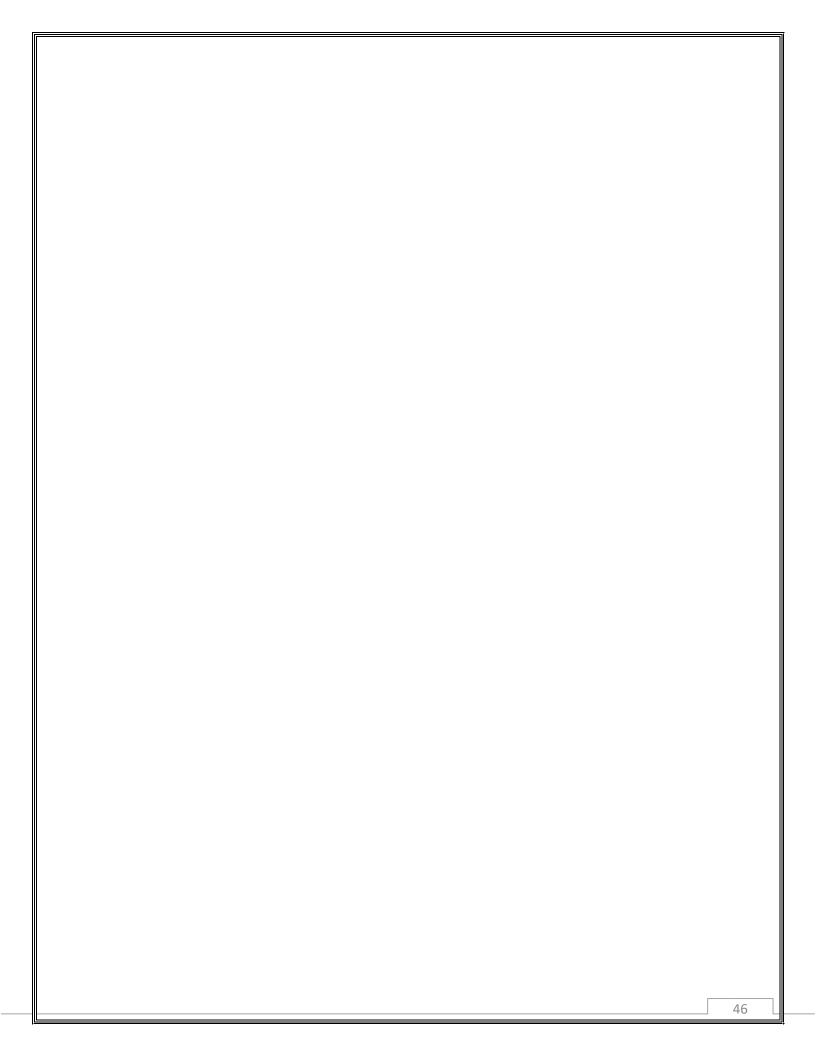
```
obj.commit()
                         apply id="select apply id from job where dname='{}' and department='{}".format(name,
                                                                     department)
                         mycursor.execute(apply id)
                         apply_id=mycursor.fetchall()
                         print("Thank you for apply in ABC hospital and your apply ID is:",apply_id[0][0])
                         front()
                       else:
                         print("\n!!!!!!!!!!!!invalid phone number!!!!!!!!!!!!")
                         print("
                                       please try again
              else:
                  print("*"*12,"INVALID NAME!!!","*"*12)
                  apply job(mobile number)
     else:
         print("*"*14,"You are already doctor in this hospital","*"*14)
         print("*"*16,"You can not apply for job","*"*16)
         doctor(mobile_number)
# for check appointment
def view appointment(mobile number):
   print(mobile number)
   a="""select * from doctor,appointment where doctor.doctorid=appointment.doctorid
                                     and phone_number={}""".format(mobile_number)
   mycursor.execute(a)
   a=mycursor.fetchall()
   if len(a)<1:
      print("*"*15,"NO APPOINTMENT","*"*15)
      doctor create()
   else:
      ID=a[0][0]
      b=len(a)
      print("Total number of appointment are:",b)
      print("")
```

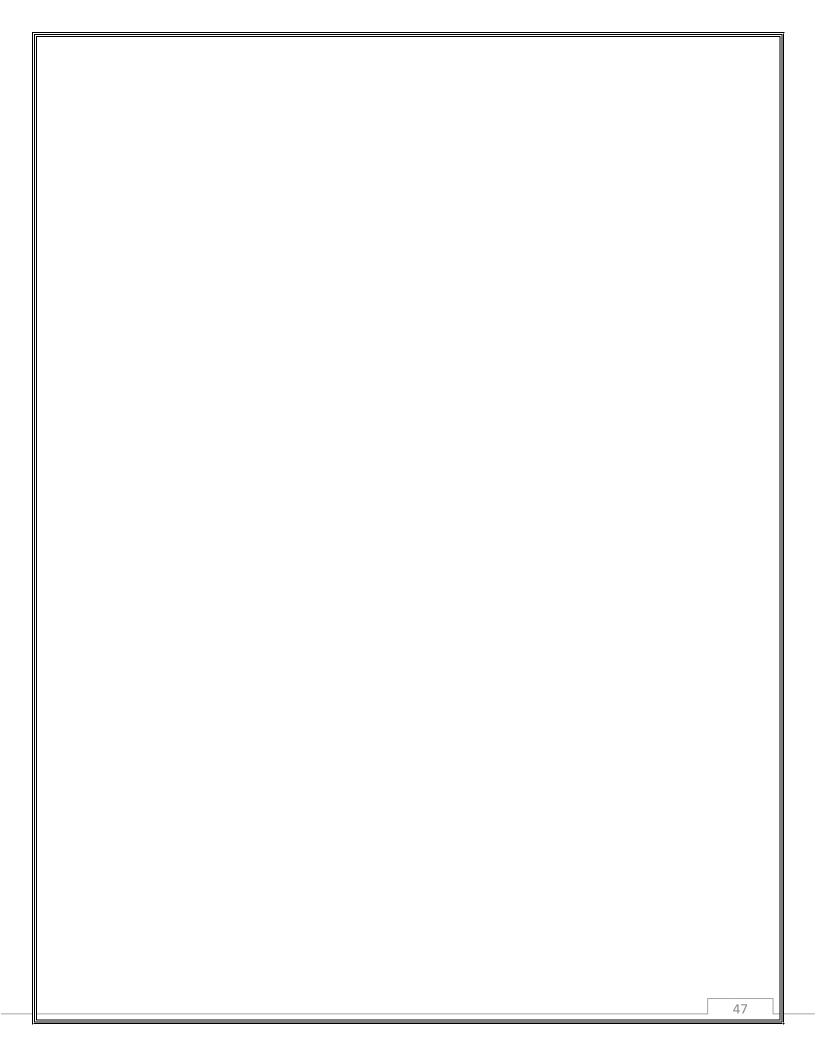
```
for i in a:
        print("patient name:",i[8])
        print("patient age:",i[9])
        print("patient gender:",i[10])
        print("patient mobile number:",i[11])
        print("")
     doctor_create()
# To check salary of doctor
def salary():
  a="select * from salary"
  mycursor.execute(a)
  result1=mycursor.fetchall()
  print("DEPARTMENT:",result1[0][0], "," "SALARY:","Rs",result1[0][1])
  print("DEPARTMENT:",result1[1][0], "," "SALARY:","Rs",result1[1][1])
  print("DEPARTMENT:",result1[2][0], "," "SALARY:","Rs",result1[2][1])
  print("DEPARTMENT:",result1[3][0], "," "SALARY:","Rs",result1[3][1])
  print("DEPARTMENT:",result1[4][0], "," "SALARY:","Rs",result1[4][1])
  print("DEPARTMENT:",result1[5][0], "," "SALARY:","Rs",result1[5][1])
  print("DEPARTMENT:",result1[6][0], "," "SALARY:","Rs",result1[6][1])
  print("DEPARTMENT:",result1[7][0], "," "SALARY:","Rs",result1[7][1])
  print("DEPARTMENT:",result1[8][0], "," "SALARY:","Rs",result1[8][1])
  print("DEPARTMENT:",result1[9][0], "," "SALARY:","Rs",result1[9][1])
```

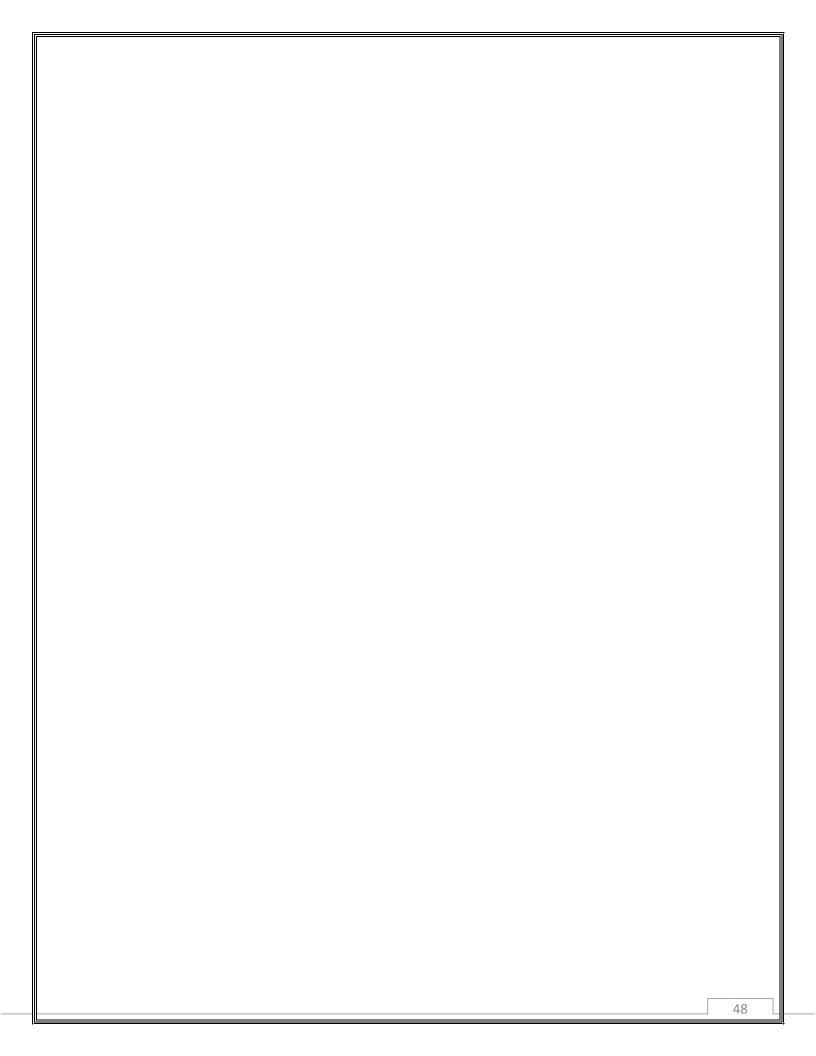
```
# for introduction
def front_page():
     print("")
     print(" "*58)
     print("@"*15,"CLASS 12th CS PROJECT(083)","@"*15)
     print("."*25,"WELCOME","."*25)
     print("."*28,"TO","."*27)
     print("."*18,"HOSPITAL MANAGEMENT SYSTEM","."*13)
     print("."*21,"MADE BY: JATIN KUMAR","."*16)
     print("."*17,"SUBMITTED TO: Saroj MISHRA SIR","."*10)
     print("."*23,"SESSION: 2022-2023","."*16)
     print("_"*58)
     print("")
while True:
    front_page()
    print("")
    print(" "*10,"*"*70)
    print(" ")
           WELCOME TO HOSPITAL MANAGEMENT SYSTEM".center(80))
    print("
    print(" ")
    print(" "*10,"*"*70)
    print(" ")
    print("
                           press 1 for ADMIN:
    print("
    print("
                           press 2 for PATIENT:
    print("
    print("
    print("
                     press 3 For DOCTOR:
    print("
                     press 4 For EXIT:
    print("
    print("
```

```
ch=input()
if ch=="1":
    password=input("enter the password:")
    password1="select * from password"
    mycursor.execute(password1)
    password2=mycursor.fetchall()
    if password==password2[0][0]:
      admin()
    else:
      print("\n**********INCORRECT PASSWORD!!!**********
      print("")
      front()
elif ch=="2":
  patient()
elif ch=="3":
  doctor_create()
elif ch=="4":
  print("*"*16,"THANK YOU","*"*16)
  break
else:
   print("!"*10,"INVALID CHOICE","!"*10)
```









DATABASE

Database name is:- COVID

patient_name	age	gender	mobile_number	doctorid	department
jatin	18	male	1235467805	13	Eye
aman	20	female	8756430976	5	Dental
akash	j 23	male i	1234543234	11	ENT
suprit	23	male	1234567654	13	Eye
jati kumar rai	23	male	9098564534	2	Medicine
jatin kumar	23	male	7005956407	7	surgiical
jatun	1	male	9098785643	10	surgiical
kumar	25	male	9098987678	3	Eye ¯
rohan	45	male	9098987656	3	Eye
akash	34	male	1234354323	7	surgiical
sukriti kakar	43	male	1234567890	5	Diabetic
aman	23	male	9098909876	11	ENT
sanket	4	male	1234565678	11	ENT
suprit	225	male	1234567654	18	ENT
kumar rai	34	male	7005648637	6	Dental
badshah	34	male	9098767896	9	Gynecology
igon	34	male	1234567895	23	Medicine
Akash kumar	19	male	8856974567	11	ENT
Aman kumar	25	male	9909875907	24	surgiical

doctorid doctorname	department	gender	work_experience	phone_number	dateofjoinig	salary
1 Dr. Susil chakraborty 2 Dr. Sanjeev kumar 3 Dr. Soumya Ghosh Kundu 4 Dr. Chinmoy BOse 5 Dr. Jayasree Barman 6 Dr. Rajit Mallick 7 Dr. Souvik Saha 8 Dr. Abhijit Banerjee 9 Dr. Mousumi Banerjee 10 Dr. Arkaprovo Roy 11 Dr. Alokendu Bose 12 Dr. Dipanjan Mukherjee 13 Dr. Monalisa Pramanik 14 Dr. G.S. Sharma 15 Dr. Manas kumar Pal 18 Dr.rahul 21 Dr.jatin 22 Dr.asd 24 Dr. Rajesh malhotra	Medicine Medicine Eye Gynecology Dental Dental surgiical Orthopedic Gynecology surgiical ENT Diabetic Eye Child Skin ENT Dental Eye surgiical	male male female male male male male female male male male male male male male	5 5 6 4 4 5 9 6 7 6 4 6 3 8 3 5 5	7005612629 5674398259 6530967837 9873450763 4563897639 2568564729 5283648972 2587964387 7936486281 4685729426 3254689756 4968153467 2549637864 9785630214 5496725894 2547986342 7005956407 1234554321 7005946395		40000 350000 45000 35000 30000 43000 50000 50000 55000 45000 45000 45000 43000 43000 43000 43000 43000 43000

mysql> select * from doctor	record;				
doctorid doctorname	department	gender	phone_number	dateofjoinig	date_of_relived
16 Dr.jatin kumar 17 jatin 19 Dr.rahul 20 Dr.rahul 23 jatin kumar ra	ent ENT ENT	female male male male male	2364789731 1223456789 2547986342 2547986342 1234565432	2022-11-01 2022-11-10 2022-11-11 2022-11-11 2023-01-23	2022-11-01 2022-11-11 2022-11-11 2022-11-11 2023-01-29
5 rows in set (0.00 sec)	T				,

apply_id apply_job_date	+ dname +	 department 	work_experience	gender	phone_number	+ status
1 2022-11-01 2 2022-11-11 3 2022-11-11 4 2022-11-11 5 2023-01-23	Dr.rahul Dr.jatin Dr.asd Dr.qwer jatin kumar rai	ENT Dental Eye Gynecology Medicine	6	female	2547986342 7005956407 1234554321 5432112345 1234565432	APPROVED APPROVED APPROVED REJECTED APPROVED

```
mysql> select * from login;
                      mobile_number | password
  name
                         7005956407
7005956408
 jatin
kumar
                                        jatin@2005
                                        asd123
                         7005612629
  suprit
                                        sup@098
                         5674398259
                                        1254
  aman
  sanket
                         2549637864
                                       12345
                         6530967837
                                       1267
 jk
                         4563897639
 qwdf
                                       1209
                         1234554321
  XC
                                        po
                         5432112345
                                       op
  jatin kumar rai
                         1234565432
                                        1q2
  Rajesh malhotra
                         7005946395
                                       malhotra
11 rows in set (0.00 sec)
```

```
mysql> select * from password;
  password
1 row in set (0.00 sec)
mysql> select * from patient;
  patientid | pname
                                                                                                 admitdate
                                               page
                                                        | pgender
                                                                           phoneno
                                                                                                                      patient_problem
                                                                                                 2022-11-07
2022-11-07
2022-11-09
2022-11-09
2022-11-09
2022-11-09
2022-11-09
2022-11-09
2022-11-10
2023-01-20
2023-01-29
                                                                            1234123456
1223344556
9087654321
             104
105
106
                                                   23
50
                       jatin k
                                                           male
female
                                                                                                                       throat problem
                      rohan
jk
jatin
                                                                                                                       nose problem surgiical problem child problem
                                                   25
                                                           female
                                                                            1234567890
             107
                                                           male
                                                                            987654321
980988765
1234566789
1234566543
             108
109
                       ritick kumar
                                                   23
34
23
25
24
12
12
                                                                                                                       Skin problem
                                                           male
                       rahu1
                                                           male
male
                                                                                                                       mouth problem nose problem
             \overline{110}
                       j k
             111
                       Kumar
                                                           male
                                                                                                                       mouth problem
                                                                            6597483258
             112
                                                                                                                       hormones problem
                       asd
                                                           male
                                                                            9436756857
9087678645
8837248607
                                                                                                                       eye problem
ear problem
             114
                       aman
                                                           male
             \overline{115}
                       jatin kumar
                                                           male
             116
                       Abhishek
                                                   18
                                                           male
                                                                                                                       throat problem
12 rows in set (0.00 sec)
```

patientid		page		phoneno		dischargedate
124	we	3	male	1234565432	2022-10-17	2022-10-21
122	kumar	23	male	1234567893	2022-10-17	2022-10-21
101	jatin	16	male	7005956407	2022-10-04	2022-10-21
102	kumar	17	male	123456778	2022-10-04	2022-10-21
101	jatin	14	male	1234567890	2022-11-07	2022-11-09
102	jatin kumar	13	male	1234567890	2022-11-07	2022-11-09
103	aksah	23	female	9087654342	2022-11-07	2022-11-10
113	jkq	13	male	1212121212	2022-11-09	2023-01-29

```
mysql> select * from salary;
                salary
  department
  Medicine
                 40000
                 45000
  Eye
  Gynecology
                 35000
                 43000
  Dental
  surgiical
                 80000
  Orthopedic
                 50000
                 25000
  ENT
  Diabetic
                 45000
  Child
                 60000
                 30000
  Skin
10 rows in set (0.07 sec)
```

staffid	staffname	staffage	staffgender	staffphoneno	dateofjoining	salary
107	j k	56	female	1234567976	2022-10-21	5000
108	jatin	23	female	1234567890	2022-10-21	2000
109	aman kumar	45	female	1234678903	2022-10-21	2000
110	KUMAR	57	female	1230981274	2022-10-21	2043
111	ritick	25	female	5432564357	2022-10-21	2000
114	Rohan	34	male	8809765645	2023-01-29	45000

staffid	staffname	staffage	staffgender	staffphoneno	joiningdate	salary	total_working_day
105	 ik	 14	 male	9876543210	2022-10-06	45333	2022-10-19
101	jk	123	male	1234512345	2022-10-06	23000	2022-10-21
102	jk	123	amle	1234567898	2022-10-06	12	2022-10-21
106	jatim	35	male	5432167890	2022-10-06	765432	2022-10-21
103	JKR	25	female	1234567898	2022-10-06	20000	2022-11-10
104	JATIN	13	female	987654321	2022-10-06	343	2022-11-10
113	jatin kumar	24	male	9087675643	2022-11-09	40000	2023-01-25
112	jatin umar	23	male	1234567890	2022-11-09	20000	2023-01-29

```
mysql> select *
                 from symptoms_and_dept;
                            department
 symptoms
   For eye problem
                            Eye
       ear problem
                            ENT
   For
   For nose problem
                            ENT
       throat problem
                            ENT
   For
       hormones problem
                            Gynecology
   For
       mouth problem
                            Dental
   For
       any surgiical
                            surgiical
   For
                            Orthopedic
       bone problem
   For
       sugar patient
Skin problem
                            Diabetic
   For
                            Skin
   For child problem
                            Child
                            Medicine
   other
   rows in set (0.05 sec)
```

```
mysql> select * from treatment_price;
                          price
  symptoms
  For eye problem
                           4500
  For ear problem
                           3500
                           2000
  For nose problem
  For throat problem
                           2500
  For hormones problem
                           3000
  For mouth problem
                           1500
  For any surgiical
                           6000
  For bone problem
                           5000
                           5500
  For sugar patient
 For Skin problem
                           4500
 For child problem
                           5000
  other
                           3500
12 rows in set (0.05 sec)
```



OUTPUT

= RESTART:	C:\Users\lenovo\AppData\Local	Programs\Python\Python	310\class 12 project.py
	@@@@@ CLASS 12th CS PROJECT(083	ZSTEMSHRA SIR	
	**************************************	PITAL MANAGEMENT SYSTEM	
	press 1 fo	or ADMIN:	<u> </u>
	press 2 for	PATIENT:	1
	press 3 F	or DOCTOR:	1
	press 4 Fo	or EXIT:	1
1 enter th	e password:kumar		

****** WE	LCOME TO ADMIN SECTION **********	
-	press 1 for ADD PATIENTS:	1
Ī	press 2 for ADD STAFF:	I
	press 3 for DISPLAY PATIENTS RECORD:	1
	press 4 for DISPLAY STAFF RECORD:	1
	press 5 for CHANGE PASSWORD:	1
	press 6 for REMOVE PATIENTS:	1
	press 7 for REMOVE STAFF:	1
	press 8 for UPDATE PATIENT:	1
	press 9 for UPDATE STAFF	1
	press 10 for ADD DOCTOR	1
	press 11 for REMOVE DOCTOR	
_ 	press 12 for Approval required	1
_ 	press 13 for LOGOUT:	1

```
********** ENTER PATIENT DETAILS **********
enter patient name:Abhishek
enter patient age:18
******* select your gender ********
if patient is male then press 1
if patient is female then press 2
enter the patient 10 digit phone number:8837248607
******** enter patient problem *********
1. eye problem
ear problem
nose problem
4. throat problem
5. hormones problem
6. mouth problem

    any surgiical

8. bone problem
sugar patient
10. Skin problem
11. child problem
12. other problem
enter the choice:4
*******patient add SUCCESSFUL and patient id is 116 *******
Do you want to add more patient(y/n):n
********** ENTER STAFF DETAILS **********
enter the staff name:Rohan
enter the age of staff:34
******* select gender ********
if staff is male then press 1
if staff is female the press 2
enter the staff phone number:8809765645
enter the salary40000
Do you want to add more staff(y/n):n
```

```
enter patient ID:105
******* PATIENT DETAILS ARE GIVEN BELOW: ********
           patient id is: 105
           patient name is: rohan
           patient age is: 50
           patient gender is: female
           patient problem: nose problem
           patient phone number is: 1223344556
           patient admit date: 2022-11-07
Do you want more patient record(y/n):n
enter staff ID:114
******* STAFF DETAILS ARE GIVEN BELOW: ********
           staff id is: 114
           staff name is: Rohan
           ataff age is: 34
           staff gender is: male
           staff phone number is: 8809765645
           staff date of joining: 2023-01-29
           staff salary: Rs 40000
Do you want more staff record(y/n):n
enter the old password:kumar
enter the new password:cs
re-enter the new password:cs
******** PASSWORD CHANGE SUCCESSFUL **********
```

```
enter patient id 113
Do you confirm remove this 113 if yes press(y) else press any key except(y)):
У
Do you want more remove patient(y/n):n
enter staff id 112
Do you confirm remove this 112 if yes press(y) else press any key except(y)):
Do you want more remove patient(y/n):n
enter patient ID :114
what do you want to update??
press 1 for update patient name
press 2 for update patient age
press 3 for update patient gender
press 4 for update patient phone number
enter the patient 10 digit phone number: 9436756857
******** PATIENT PHONE NUMBER UPDATE SUCCESSFUL **********
Do you want to update the gender of more patient??(y/n):n
enter staff id:114
what do you want to update??
press 1 for update staff name
press 2 for update staff age
press 3 for update staff gender
press 4 for update staff phone number
press 5 for update staff salary
enter the salary45000
******** SALARY UPDATE SUCCESSFUL *********
Do you want to update the details of more staff??(y/n):n
```

```
10
*****
               ENTER DOCTOR DETAILS **********
enter doctor name:Dr. Rajesh malhotra
enter the department:surgiical
if doctor is male then press 1
if doctor is female then press 2
1
enter the workexperience(in year):5
enter the patient 10 digit phone number: 7005946395
enter salary:60000
******* DOCTOR ADD SUCCESSFUL AND DOCTOR ID 24 **********
11
enter doctor id 23
Do you confirm remove this 23 if yes press(y) else press any key except(y)):
***********REMOVE SUCCESSFUL***********
Do you want more remove patient(y/n):n
         ******************
                           WELCOME TO ABC HOSPITAL
         ***************
                 press 1 for ADMIN:
                        press 2 for PATIENT:
                     press 3 For DOCTER:
                        press 4 For EXIT:
******* WELCOME TO OUR MOBILE APPLICATION ***********
press 1 for book appointment
press 2 FOR treatment price
press 3 For back again
############## SELECT YOUR PROBLEM!!! ###############
1. For eye problem
2. For ear problem
3. For nose problem
4. For throat problem
5. For hormones problem
6. For mouth problem
7. For any surgiical
8. For bone problem
9. For sugar patient
10. For Skin problem
11. For child problem
12. For other problem
13. for back again
```

```
enter the choice:4
There are 2 doctor
doctor id: 11
Doctor name: Dr. Alokendu Bose
department: ENT
gender: male
work experience: 4
doctor id: 18
Doctor name: Dr.rahul
department: ENT
gender: male
work experience: 5
you want to book appointment(y/n):y
enter the doctor id:11
enter your name: Akash kumar
enter patient age:19
if you are male then press 1
if you are female then press 2
enter your mobile number:8856974567
appointment book SUCCESSFUL
        ******************
                         WELCOME TO ABC HOSPITAL
        *****************
                       press 1 for ADMIN:
                  press 2 for PATIENT:
                      press 3 For DOCTER:
                    press 4 For EXIT:
press 1 for create account
press 2 for login
press 3 for back
```

```
******* THE ACCOUNT *********
enter your name: Rajesh malhotra
enter your mobile number:7005946395
enter passwordmalhotra
re-enter your passwordmalhotra
******* ACCOUNT CREATED *********
enter mobile number: 7005946395
enter passwordmalhotra
******* WELCOME TO DOCTOR SECTION *********
press 1 for apply job
press 2 for view appointment
press 3 for view salary department wise
press 4 for exit
7005946395
Total number of appointment are: 1
patient name: Aman kumar
patient age: 25
patient gender: male
patient mobile number: 9909875907
press 1 for create account
press 2 for login
press 3 for back
                          WELCOME TO ABC HOSPITAL
        *******************
                       press 1 for ADMIN:
                      press 2 for PATIENT:
                       press 3 For DOCTER:
                       press 4 For EXIT:
************ THANK YOU ********
```

