**INVESTIGATORY PROJECT**

**COMPUTER SCIENCE Class XII**

**Python – MySqL connectivity**

**#Database Creation**

**import mysql.connector as msq**

**import tqdm**

**import time**

**con=msq.connect(host='localhost',user='root',passwd='student',database='')**

**cur=con.cursor()**

**if con.is\_connected():**

**cur.execute("create database if not exists hospital")**

**cur.execute("use hospital")**

**cur.execute("create table patients\**

**(P\_ID varchar(7) primary key not null,\**

**P\_Name varchar(25),\**

**P\_Age int(3),\**

**P\_Gender varchar(10),\**

**P\_Address varchar(100),\**

**P\_PhNo varchar(15));")**

**for i in tqdm.tqdm(range(50)):**

**time.sleep(0.001)**

**print("Table Patients Successfully Created")**

**cur.execute("create table Staff\**

**(S\_ID varchar(5) primary key not null,\**

**S\_Name varchar(25),\**

**S\_Desig varchar(15),\**

**S\_Age int(3),\**

**S\_Gender varchar(15),\**

**S\_PhNo varchar(15),\**

**S\_Address varchar(100),\**

**S\_Dept varchar(25));")**

**for i in tqdm.tqdm(range(50)):**

**time.sleep(0.001)**

**print("Table Staff Successfully Created")**

**cur.execute("create table Pharmacy\**

**(Med\_ID varchar(7) primary key not null,\**

**Med\_Name varchar(30),\**

**Med\_Price int(5));")**

**for i in tqdm.tqdm(range(50)):**

**time.sleep(0.001)**

**print("Table Pharmacy Successfully Created")**

**cur.execute("create table Services\**

**(S\_ID varchar(10) primary key not null,\**

**S\_Name varchar(25),\**

**S\_Price int(5));")**

**for i in tqdm.tqdm(range(50)):**

**time.sleep(0.001)**

**print("Table Services Successfully Created")**

**cur.execute("create table Appointments\**

**(A\_ID varchar(10) PRIMARY KEY NOT NULL,\**

**P\_ID varchar(7) not null,\**

**S\_ID varchar(10),\**

**App\_Date date,\**

**App\_Time varchar(5),\**

**P\_Name varchar(30),\**

**P\_PhNo varchar(12));")**

**for i in tqdm.tqdm(range(50)):**

**time.sleep(0.001)**

**print("Table Appointments Successfully Created")**

**cur.execute("Create Table Admission(Ad\_ID varchar(7) not null primary key,\**

**P\_ID varchar(15),\**

**P\_NAME varchar(50),\**

**P\_PhNo varchar(15),\**

**S\_ID varchar(7),\**

**S\_NAME varchar(50),\**

**R\_ID varchar(7),\**

**Ad\_date DATE,\**

**Ad\_Time TIME,\**

**Dis\_Date DATE,\**

**Dis\_Time TIME);")**

**for i in tqdm.tqdm(range(50)):**

**time.sleep(0.001)**

**print("Table Admission Successfully Created")**

**cur.execute('create table Billing\**

**(P\_ID varchar(7) not null,\**

**M\_Price int(8) Default 0 ,\**

**S\_Price int(8) default 0,\**

**Ad\_Price int(8) default 0,\**

**T\_Price int(10) default 0);')**

**for i in tqdm.tqdm(range(50)):**

**time.sleep(0.001)**

**print('Table Billing Successfully Created')**

**cur.execute('Create Table Accounts(BDate date not null,\**

**P\_ID varchar(10) not null,\**

**P\_Price int(10) not null default 0,\**

**S\_Price int(10) not null default 0,\**

**Ad\_Price int(10) not null default 0,\**

**T\_Price int(10) not null default 0);')**

**for i in tqdm.tqdm(range(50)):**

**time.sleep(0.001)**

**print('Table Accounts Successfully Created')**

**con.commit()**

**con.close()**

**print("Connection closed")**

**else:**

**print("Error in connection")**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* End of DB creation \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**#Hospital Management**

**print("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*")**

**print("\* \*")**

**print("\* Welcome To Hospital Management \*")**

**print("\* \*")**

**print("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*")**

**import mysql.connector as msq**

**con=msq.connect(host='localhost',user='root',passwd='student',database='hospital')**

**cur=con.cursor()**

**cur.execute('set autocommit=1')**

**x=0**

**while x==0:**

**print("-------------------------------")**

**print("| 1:Enter Admin Mode |")**

**print("| 2:Exit The Software |")**

**print("-------------------------------")**

**choice=input("Enter Your Choice : ")**

**if choice=='1':**

**print("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*")**

**print("| Welcome To Admin Mode |")**

**print("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*")**

**x=1**

**passwd=input("Enter the password : ")**

**if passwd=='':**

**while x==1:**

**print("-------------------------------------")**

**print("| 1:Patient Details |")**

**print("| 2:Staff Details |")**

**print("| 3:Pharmacy Details |")**

**print("| 4:Service Details |")**

**print("| 5:Appointment Details |")**

**print("| 6:Admission Details |")**

**print("| 7:Billing / Accounts |")**

**print("| 8:Return To Main Menu |")**

**print("-------------------------------------")**

**x=2**

**ch=input("Enter your choice : ")**

**if ch=='1':**

**while x==2:**

**print("---------------------------------------")**

**print("| 1:Add Patient Details |")**

**print("| 2:View Patient Details |")**

**print("| 3:Modify Patient Details |")**

**print("| 4:Delete Patient Record |")**

**print("| 5:Back to Previous Menu |")**

**print("---------------------------------------")**

**choice=input("Enter Your Choice : ")**

**if choice=='1':**

**sql='Select COUNT(P\_ID) from Patients;'**

**cur.execute(sql)**

**r=cur.fetchall()**

**n=r[0][0]**

**cur.execute('Select P\_ID from Patients;')**

**rs=cur.fetchall()**

**if n==0:**

**P\_ID='P1000'**

**else:**

**x=rs[n-1][0]**

**a=int(x[1:])**

**P\_ID='P'+str(a+1)**

**P\_Name = input("Enter the Patient Name : ")**

**P\_Age=int(input("Enter Patient Age : "))**

**P\_Gender=input("Enter Patient Gender : ")**

**P\_Address=input("Enter Patient Address : ")**

**P\_PhNo=input("Enter Patient Phone Number : ")**

**sql="insert into Patients values(%s,%s,%s,%s,%s,%s)"**

**v=(P\_ID,P\_Name,P\_Age,P\_Gender,P\_Address,P\_PhNo)**

**cur.execute(sql,v)**

**print('Record Added Successfully ')**

**print("Your Patient ID is ",P\_ID)**

**x=2**

**elif choice=='2':**

**x=4**

**while x==4:**

**print("-----------------------------------------")**

**print("| 1: Use Patient ID as Key |")**

**print("| 2: Use Mobile Number as Key |")**

**print("-----------------------------------------")**

**opt=input("Enter Your Choice : ")**

**if opt=='1':**

**ids=input("Enter The Patient ID : ")**

**break**

**elif opt=='2':**

**ids=input("Enter Mobile Number : ")**

**break**

**else:**

**print("Invalid Choice")**

**print("Please Enter Either 1 or 2 ")**

**if choice=='2':**

**if con.is\_connected():**

**cur=con.cursor()**

**sql="select exists (select \* from patients\**

**where P\_ID=%s or P\_PhNo=%s)"**

**idsd=(ids,ids)**

**cur.execute(sql,(idsd))**

**rs=cur.fetchall()**

**if rs[0][0]==0:**

**print("Patient Record does not exist")**

**x=2**

**else:**

**sql='select \* from patients where P\_ID=%s or P\_PhNo=%s'**

**idsd=(ids, ids)**

**cur.execute(sql,idsd)**

**r=cur.fetchall()**

**for i in r:**

**print("Patient ID : ",i[0])**

**print("Patient Name : ",i[1])**

**print("Patient Age : ",i[2])**

**print("Patient Gender : ",i[3])**

**print("Patient Address : ",i[4])**

**print("Patient Phone Number : ",i[5])**

**x=2**

**elif choice=='3':**

**ids = input("Enter the Patient ID : ")**

**if con.is\_connected():**

**cur=con.cursor()**

**sql="select exists (select \* from patients\**

**where P\_ID=%s or P\_PhNo=%s)"**

**idsd=(ids,ids)**

**cur.execute(sql,(idsd))**

**rs=cur.fetchall()**

**if rs[0][0]==0:**

**print("Patient Record does not exist")**

**x=2**

**else:**

**x=3**

**while x==3:**

**print("-----------------------------------------")**

**print("| 1:Edit Patient Name |")**

**print("| 2:Edit Patient Age |")**

**print("| 3:Edit Patient Gender |")**

**print("| 4:Edit Patient Address |")**

**print("| 5:Edit Patient Phone No |")**

**print("| 6:Go Back |")**

**print("-----------------------------------------")**

**ch=input("Enter Your Choice : ")**

**if ch=='1':**

**nm=input("Enter The Name : ")**

**sql="update patients\**

**set P\_Name=%s\**

**where P\_ID=%s"**

**v=(nm,ids,)**

**cur.execute(sql,v)**

**print("Record Updated Successfully")**

**elif ch=='2':**

**ag=input("Enter The Age : ")**

**sql="update patients\**

**set P\_Age=%s\**

**where P\_ID=%s"**

**v=(ag,ids)**

**cur.execute(sql,v)**

**print("Record Updated Successfully")**

**elif ch=='3':**

**gd=input("Enter The Gender : ")**

**sql="update patients\**

**set P\_Gender=%s\**

**where P\_ID=%s"**

**v=(gd,ids)**

**cur.execute(sql,v)**

**print("Record Updated Successfully")**

**elif ch=='4':**

**ad=input("Enter The Address : ")**

**sql="update patients\**

**set P\_Address=%s\**

**where P\_ID=%s"**

**v=(ad,ids)**

**cur.execute(sql,v)**

**print("Record Updated Successfully")**

**elif ch=='5':**

**pn=input("Enter The Phone No : ")**

**sql="update patients\**

**set P\_PhNo=%s\**

**where P\_ID=%s"**

**v=(pn,ids,)**

**cur.execute(sql,v)**

**print("Record Updated Successfully")**

**elif ch=='6':**

**x=2**

**break**

**else:**

**print("Invalid choice")**

**x=3**

**elif choice=='4':**

**ids = input("Enter the Patient ID : ")**

**if con.is\_connected():**

**cur=con.cursor()**

**sql="select exists (select \* from patients\**

**where P\_ID=%s or P\_PhNo=%s)"**

**idsd=(ids,ids)**

**cur.execute(sql,(idsd))**

**rs=cur.fetchall()**

**if rs[0][0]==0:**

**print("Patient Record does not exist")**

**x=2**

**else:**

**sql="Delete from Patients\**

**where P\_ID=%s"**

**v=(ids,)**

**cur.execute(sql,v)**

**print("Record Deleted Successfully")**

**x=2**

**elif choice=='5':**

**print("Returning To Previous Menu")**

**x=1**

**break**

**else:**

**print("Invalid Choice")**

**elif ch=='2':**

**x=2**

**while x==2:**

**print("-----------------------------------------")**

**print("| 1:Add Staff Details |")**

**print("| 2:View Staff Details |")**

**print("| 3:Modify Staff Details |")**

**print("| 4:Delete Staff Details |")**

**print("| 5:Back to Previous Menu |")**

**print("-----------------------------------------")**

**choice=input("Enter Your Choice : ")**

**if choice=='1':**

**sql='Select COUNT(S\_ID) from Staff;'**

**cur.execute(sql)**

**r=cur.fetchall()**

**n=r[0][0]**

**cur.execute('Select S\_ID from Staff;')**

**rs=cur.fetchall()**

**if n==0:**

**Sid='S1000'**

**else:**

**x=rs[n-1][0]**

**a=int(x[1:])**

**Sid='S'+str(a+1)**

**Sname=input("Enter Staff Name : ")**

**Sdesig=input("Enter Staff Designation : ")**

**Sage=int(input("Enter Staff Age : "))**

**Sgender=input("Enter Staff Gender : ")**

**Saddress=input("Enter Staff Address : ")**

**Sphoneno=input("Enter Staff Phone number : ")**

**Sdepartment=input("Enter The Department : ")**

**sql="insert into staff values(%s,%s,%s,%s,%s,%s,%s,%s)"**

**v=(Sid,Sname,Sdesig,Sage,Sgender,Sphoneno,Saddress,Sdepartment)**

**cur.execute(sql,v)**

**print("Record Added Succesfully")**

**x=2**

**elif choice=='2' or choice=='3' or choice=='4':**

**x=4**

**while x==4:**

**print("-----------------------------------------")**

**print("| 1: Use Staff ID as Key |")**

**print("| 2: Use Staff Name as Key |")**

**print("-----------------------------------------")**

**opt=input("Enter choice : ")**

**if opt=='1':**

**ids=input("Enter The Staff ID : ")**

**break**

**elif opt=='2':**

**ids=input("Enter Staff Name : ")**

**break**

**else:**

**print("Invalid Choice")**

**print("Please Enter Either 1 or 2 ")**

**if choice=='2':**

**if con.is\_connected():**

**cur=con.cursor()**

**sql="select exists (select \* from staff\**

**where S\_ID=%s or S\_Name=%s)"**

**idsd=(ids,ids)**

**cur.execute(sql,(idsd))**

**rs=cur.fetchall()**

**if rs[0][0]==0:**

**print("Invalid Key")**

**else:**

**sql='select \* from staff where S\_ID=%s or S\_Name=%s'**

**idsd=(ids,ids)**

**cur.execute(sql,idsd)**

**r=cur.fetchall()**

**print("Staff ID : ",r[0][0])**

**print("Staff Name : ",r[0][1])**

**print("Staff Age : ",r[0][3])**

**print("Staff Gender : ",r[0][4])**

**print("Staff Phone Number : ",r[0][5])**

**print("Staff Address : ",r[0][6])**

**print("Staff Designation : ",r[0][2])**

**print("Staff Department : ",r[0][7])**

**x=2**

**elif choice=='3':**

**x=3**

**while x==3:**

**print("-----------------------------------------")**

**print("| 1:Edit Staff Name |")**

**print("| 2:Edit Staff Age |")**

**print("| 3:Edit Staff Gender |")**

**print("| 4:Edit Staff Address |")**

**print("| 5:Edit Staff Phone No |")**

**print("| 6:Edit Staff Designation |")**

**print("| 7:Edit Staff Department |")**

**print("| 8:Go Back |")**

**print("-----------------------------------------")**

**ch=input("Enter Your Choice : ")**

**if ch=='1':**

**nm=input("Enter The Name : ")**

**sql="update staff\**

**set S\_Name=%s\**

**where S\_ID=%s or S\_Name=%s"**

**v=(nm,ids,ids)**

**cur.execute(sql,v)**

**print("Record Updated Successfully")**

**elif ch=='2':**

**ag=input("Enter The Age : ")**

**sql="update staff\**

**set S\_Age=%s\**

**where S\_ID=%s or S\_Name=%s"**

**v=(ag,ids,ids)**

**cur.execute(sql,v)**

**print("Record Updated Successfully")**

**elif ch=='3':**

**gd=input("Enter The Gender : ")**

**sql="update staff\**

**set S\_Gender=%s\**

**where S\_ID=%s or S\_Name=%s"**

**v=(gd,ids,ids)**

**cur.execute(sql,v)**

**print("Record Updated Successfully")**

**elif ch=='4':**

**ad=input("Enter The Address : ")**

**sql="update staff\**

**set S\_Address=%s\**

**where S\_ID=%s or S\_Name=%s"**

**v=(ad,ids,ids)**

**cur.execute(sql,v)**

**print("Record Updated Successfully")**

**elif ch=='5':**

**pn=input("Enter The Phone No : ")**

**sql="update staff\**

**set S\_PhNo=%s\**

**where S\_ID=%s or S\_Name=%s"**

**v=(pn,ids,ids)**

**cur.execute(sql,v)**

**print("Record Updated Successfully")**

**elif ch=='6':**

**desig=input("Enter The Designation : ")**

**sql="update staff\**

**set S\_Desig=%s\**

**where S\_ID=%s or S\_Name=%s"**

**v=(desig,ids,ids)**

**cur.execute(sql,v)**

**elif ch=='7':**

**dept=input("Enter The Department : ")**

**sql="update staff\**

**set S\_Dept=%s\**

**where S\_ID=%s or S\_name=%s"**

**v=(dept,ids,ids)**

**cur.execute(sql,v)**

**print("Record Updated Successfully")**

**elif ch=='8':**

**x=2**

**print("Returning to Previous Menu")**

**break**

**else:**

**print("Invalid choice")**

**x=3**

**elif choice=='4':**

**sql="Delete from Staff\**

**where S\_ID=%s or S\_Name=%s"**

**v=(ids,ids)**

**cur.execute(sql,v)**

**print("Record Deleted Successfully")**

**x=2**

**elif choice=='5':**

**print("Returning To Previous Menu")**

**x=1**

**break**

**else:**

**print("Invalid Choice")**

**elif ch=='3':**

**x=2**

**while x==2:**

**print("-----------------------------------------")**

**print("| 1:Add Meds Details |")**

**print("| 2:View Meds Details |")**

**print("| 3:Modify Meds details |")**

**print("| 4:Delete Meds Details |")**

**print("| 5:Back to Previous Menu |")**

**print("-----------------------------------------")**

**choice=input("Enter Your Choice : ")**

**if choice=='1':**

**sql='Select COUNT(Med\_ID) from Pharmacy;'**

**cur.execute(sql)**

**r=cur.fetchall()**

**n=r[0][0]**

**cur.execute('Select Med\_ID from Pharmacy;')**

**rs=cur.fetchall()**

**if n==0:**

**Med\_ID='M1000'**

**else:**

**x=rs[n-1][0]**

**a=int(x[1:])**

**Med\_ID='M'+str(a+1)**

**Med\_Name=input("Enter The Med Name : ")**

**Med\_Price=int(input("Enter The Price : "))**

**sql="insert into pharmacy values(%s,%s,%s)"**

**v=(Med\_ID,Med\_Name,Med\_Price)**

**cur.execute(sql,v)**

**print("Record Added Succesfully")**

**x=2**

**elif choice=='2' or choice=='3' or choice=='4':**

**x=4**

**while x==4:**

**print("-----------------------------------------")**

**print("| 1: Use Med ID as Key |")**

**print("| 2: Use Med Name as Key |")**

**print("-----------------------------------------")**

**opt=input("Enter choice : ")**

**if opt=='1':**

**ids=input("Enter The Med ID : ")**

**break**

**elif opt=='2':**

**ids=input("Enter Med Name : ")**

**break**

**else:**

**print("Invalid Choice")**

**print("Please Enter Either 1 or 2 ")**

**if choice=='2':**

**if con.is\_connected():**

**cur=con.cursor()**

**sql="select exists (select \* from pharmacy\**

**where Med\_Name=%s or Med\_Id=%s)"**

**idsd=(ids,ids)**

**cur.execute(sql,(idsd))**

**rs=cur.fetchall()**

**if rs[0][0]==0:**

**print("Invalid Key")**

**else:**

**sql='select \* from pharmacy where Med\_Name=%s or Med\_ID=%s'**

**idsd=(ids,ids)**

**cur.execute(sql,idsd)**

**r=cur.fetchall()**

**print("Med ID : ",r[0][0])**

**print("Med Name : ",r[0][1])**

**print("Med Price : ",r[0][2])**

**x=2**

**elif choice=='3':**

**x=3**

**while x==3:**

**print("-----------------------------------------")**

**print("| 1:Edit Med Name |")**

**print("| 2:Edit Med Price |")**

**print("| 3:Go Back |")**

**print("-----------------------------------------")**

**ch=input("Enter Your Choice : ")**

**if ch=='1':**

**nm=input("Enter The Med Name : ")**

**sql="update pharmacy\**

**set Med\_Name=%s\**

**where Med\_Name=%s or Med\_Id=%s"**

**v=(nm,ids,ids)**

**cur.execute(sql,v)**

**print("Record Updated Successfully")**

**elif ch=='2':**

**mp=input("Enter The Price: ")**

**sql="update pharmacy\**

**set Med\_Price=%s\**

**where Med\_Name=%s or Med\_Id=%s"**

**v=(mp,ids,ids)**

**cur.execute(sql,v)**

**print("Record Updated Successfully")**

**elif ch=='3':**

**print("Returning Back To Previous Menu")**

**x=2**

**else:**

**print("Invalid choice")**

**x=3**

**elif choice=='4':**

**sql="Delete from pharmacy\**

**where Med\_Name=%s or Med\_Id=%s"**

**v=(ids,ids)**

**cur.execute(sql,v)**

**print("Record Deleted Successfully")**

**x=2**

**elif choice=='5':**

**print("Returning To Main Menu")**

**x=1**

**break**

**else:**

**print("Invalid Choice")**

**elif ch=='4':**

**x=2**

**while x==2:**

**print("-----------------------------------------")**

**print("| 1:Add Service Details |")**

**print("| 2:View Service Details |")**

**print("| 3:Modify Service Details |")**

**print("| 4:Delete Service Details |")**

**print("| 5:Back to Previous Menu |")**

**print("-----------------------------------------")**

**choice=input("Enter Your Choice : ")**

**if choice=='1':**

**sql='Select COUNT(S\_ID) from services;'**

**cur.execute(sql)**

**r=cur.fetchall()**

**n=r[0][0]**

**cur.execute('Select S\_ID from services;')**

**rs=cur.fetchall()**

**if n==0:**

**S\_ID='Sv1000'**

**else:**

**x=rs[n-1][0]**

**a=int(x[2:])**

**S\_ID='Sv'+str(a+1)**

**S\_Name=input("Enter The Service Name : ")**

**S\_Price=int(input("Enter The Price : "))**

**sql="insert into services values(%s,%s,%s)"**

**v=(S\_ID,S\_Name,S\_Price)**

**cur.execute(sql,v)**

**print("Record Added Succesfully")**

**x=2**

**elif choice=='2' or choice=='3' or choice=='4':**

**x=4**

**while x==4:**

**print("-----------------------------------------")**

**print("| 1: Use Service ID as Key |")**

**print("| 2: Use Service Name as Key |")**

**print("-----------------------------------------")**

**opt=input("Enter choice : ")**

**if opt=='1':**

**ids=input("Enter The Service ID : ")**

**break**

**elif opt=='2':**

**ids=input("Enter Service Name : ")**

**break**

**else:**

**print("Invalid Choice")**

**print("Please Enter Either 1 or 2 ")**

**if choice=='2':**

**if con.is\_connected():**

**cur=con.cursor()**

**sql="select exists (select \* from services\**

**where S\_Name=%s or S\_Id=%s)"**

**idsd=(ids,ids)**

**cur.execute(sql,(idsd))**

**rs=cur.fetchall()**

**if rs[0][0]==0:**

**print("Invalid Key")**

**else:**

**sql='select \* from services where S\_Name=%s or S\_ID=%s'**

**idsd=(ids,ids)**

**cur.execute(sql,idsd)**

**r=cur.fetchall()**

**print("Service ID : ",r[0][0])**

**print("Service Name : ",r[0][1])**

**print("Service Price : ",r[0][2])**

**x=2**

**elif choice=='3':**

**x=3**

**while x==3:**

**print("-----------------------------------------")**

**print("| 1:Edit Service Name |")**

**print("| 2:Edit Service Price |")**

**print("| 3:Go Back |")**

**print("-----------------------------------------")**

**ch=input("Enter Your Choice : ")**

**if ch=='1':**

**nm=input("Enter The Service Name : ")**

**sql="update Services\**

**set S\_Name=%s\**

**where S\_Name=%s or S\_ID=%s"**

**v=(nm,ids,ids)**

**cur.execute(sql,v)**

**print("Record Updated Successfully")**

**elif ch=='2':**

**mp=input("Enter The Price: ")**

**sql="update services\**

**set S\_Price=%s\**

**where S\_Name=%s or S\_Id=%s"**

**v=(mp,ids,ids)**

**cur.execute(sql,v)**

**print("Record Successfully Updated")**

**elif ch=='3':**

**print("Returning To Previous Menu")**

**x=2**

**else:**

**print("Invalid choice")**

**elif choice=='4':**

**sql="Delete from services\**

**where S\_Name=%s or S\_Id=%s"**

**v=(ids,ids)**

**cur.execute(sql,v)**

**print("Record Successfully Deleted")**

**x=2**

**elif choice=='5':**

**print("Returning To Previous Menu")**

**x=1**

**break**

**else:**

**print("Invalid Choice")**

**elif ch=='5':**

**x=2**

**while x==2:**

**print("------------------------------------------")**

**print("| 1:Book an Appointment |")**

**print("| 2:View Appointment |")**

**print("| 3:Modify Appointments |")**

**print("| 4:Cancel Appintments |")**

**print("| 5:Back to Previous Menu |")**

**print("------------------------------------------")**

**choice=input("Enter Your Choice : ")**

**if choice=='1':**

**x=4**

**while x==4:**

**print("------------------------------------------")**

**print("| 1:Existing Patient |")**

**print("| 2:New Patient |")**

**print("------------------------------------------")**

**choice=input("Enter Your Choice : ")**

**if choice=='2':**

**print("Enter The Patient Details")**

**sql='Select COUNT(P\_ID) from Patients;'**

**cur.execute(sql)**

**r=cur.fetchall()**

**n=r[0][0]**

**cur.execute('Select P\_ID from Patients;')**

**rs=cur.fetchall()**

**if n==0:**

**P\_ID='P1000'**

**else:**

**x=rs[n-1][0]**

**a=int(x[1:])**

**P\_ID='P'+str(a+1)**

**P\_Name=input("Enter Patient Name : ")**

**P\_Age=int(input("Enter Patient Age : "))**

**P\_Gender=input("Enter Patient Gender : ")**

**P\_Address=input("Enter Patient Address : ")**

**P\_PhNo=input("Enter Patient Phone Number : ")**

**sql="insert into Patients values(%s,%s,%s,%s,%s,%s)"**

**v=(P\_ID,P\_Name,P\_Age,P\_Gender,P\_Address,P\_PhNo)**

**cur.execute(sql,v)**

**print('Record Added Successfully')**

**print("Your Patient ID is ",P\_ID)**

**x=3**

**elif choice=='1':**

**P\_ID=input("Enter The Patient ID : ")**

**break**

**else:**

**print("Invalid Choice")**

**sql='Select COUNT(A\_ID) from Appointments;'**

**cur.execute(sql)**

**r=cur.fetchall()**

**n=r[0][0]**

**cur.execute('Select A\_ID from Appointments;')**

**rs=cur.fetchall()**

**if n==0:**

**A\_ID='A1000'**

**else:**

**x=rs[n-1][0]**

**a=int(x[1:])**

**A\_ID='A'+str(a+1)**

**S\_ID=input("Enter The Staff ID : ")**

**x=6**

**while x==6:**

**App\_Year=input("Enter The Year : ")**

**App\_Month=input("Enter The Month : ")**

**App\_Day=input("Enter The Day : ")**

**App\_Date=App\_Year+'-'+App\_Month+'-'+App\_Day**

**import datetime as dt**

**y=dt.date.today()**

**if str(App\_Date) < str(y):**

**print('Please enter a date in future')**

**x=6**

**else:**

**x=3**

**while x==3:**

**App\_Time=input("Enter The Time Slot : ")**

**sql='select \* from appointments where app\_date=%s and S\_ID=%s'**

**ids=(App\_Date,S\_ID)**

**cur.execute(sql,ids)**

**r=cur.fetchall()**

**if r==[]:**

**x=5**

**else:**

**for i in r:**

**if i[3]==App\_Time:**

**print("------------------------------------------")**

**print("| Time Slot Unavailable |")**

**print("------------------------------------------")**

**x=3**

**break**

**else:**

**x=5**

**continue**

**while x==5:**

**ids=(P\_ID,)**

**sql='select \* from patients where P\_ID=%s'**

**cur.execute(sql,ids)**

**r=cur.fetchall()**

**for i in r:**

**P\_Name=i[1]**

**P\_PhNo=i[5]**

**sql="insert into Appointments values(%s,%s,%s,%s,%s,%s,%s)"**

**v=(A\_ID,P\_ID,S\_ID,App\_Date,App\_Time,P\_Name,P\_PhNo)**

**cur.execute(sql,v)**

**print("Record Added Succesfully")**

**print("Your Appintment ID is ",A\_ID)**

**x=2**

**elif choice=='2':**

**A\_ID=input("Enter The Appointment ID : ")**

**if con.is\_connected():**

**cur=con.cursor()**

**sql="select exists (select \* from appointments\**

**where A\_Id=%s)"**

**ids=(A\_ID,)**

**cur.execute(sql,ids)**

**rs=cur.fetchall()**

**if rs[0][0]==0:**

**print("Invalid Key")**

**else:**

**sql='select \* from appointments where A\_ID=%s'**

**ids=(A\_ID,)**

**cur.execute(sql,ids)**

**r=cur.fetchall()**

**for i in r:**

**print("Appointment ID : ",i[0])**

**print("Patient ID : ",i[1])**

**print("Patient Name : ",i[5])**

**print("Patient Phone Number : ",i[6])**

**print("Assigned Doctor ID : ",i[2])**

**print("Appointment Date : ",i[3])**

**print("Appoitment Time : ",i[4])**

**x=2**

**elif choice=='3':**

**A\_ID=input("Enter The Appointment ID : ")**

**x=4**

**while x==4:**

**print("-----------------------------------------")**

**print("| 1:Edit Doctor ID |")**

**print("| 2:Edit Appointment Date |")**

**print("| 3:Edit Appointment Time |")**

**print("| 4:Go Back |")**

**print("-----------------------------------------")**

**ch=input("Enter Your Choice : ")**

**if ch=='1':**

**nm=input("Enter The Doctor ID : ")**

**sql="update Appointments\**

**set S\_ID=%s\**

**where A\_ID=%s"**

**v=(nm,A\_ID)**

**cur.execute(sql,v)**

**print("Record Updated Successfully")**

**elif ch=='2':**

**x=6**

**while x==6:**

**App\_Year=input("Enter The Year : ")**

**App\_Month=input("Enter The Month : ")**

**App\_Day=input("Enter The Day : ")**

**App\_Date=App\_Year+'-'+App\_Month+'-'+App\_Day**

**import datetime as dt**

**Y=dt.date.today()**

**if str(App\_Date) < str(Y):**

**print('Please enter a date in future')**

**x=6**

**else:**

**x=4**

**if x==4:**

**sql="update Appointments\**

**set App\_Date=%s\**

**where A\_ID=%s"**

**v=(App\_Date,A\_ID)**

**cur.execute(sql,v)**

**print("Record Updated Successfully")**

**x=4**

**elif ch=='3':**

**mp=input("Enter The Appointment Time: ")**

**sql="update Appointments\**

**set App\_Time=%s\**

**where A\_ID=%s"**

**v=(mp,A\_ID)**

**cur.execute(sql,v)**

**print("Record Updated Successfully")**

**x=4**

**elif ch=='4':**

**x=2**

**else:**

**print("Invalid choice")**

**elif choice=='4':**

**A\_ID=input("Enter The Appointment Id : ")**

**sql="Delete from Appointments\**

**where A\_ID=%s"**

**v=(A\_ID,)**

**cur.execute(sql,v)**

**print("Appointment Cancelled Successfully")**

**x=2**

**elif choice=='5':**

**print("Returning To Previous Menu")**

**x=1**

**break**

**else:**

**print("Invalid Choice")**

**elif ch=='6':**

**x=2**

**while x==2:**

**print("-----------------------------------------")**

**print(" 1:Admission |")**

**print(" 2:Discharge |")**

**print(" 3:View Admission Details |")**

**print(" 4:Go Back To Previous Menu |")**

**print("-----------------------------------------")**

**choice=input("Enter Your Choice : ")**

**if choice=='1':**

**cur.execute('Select COUNT(Ad\_ID) from Admission;')**

**r=cur.fetchall()**

**n=r[0][0]**

**cur.execute('Select Ad\_ID from Admission;')**

**rs=cur.fetchall()**

**if n==0:**

**AD\_ID='Ad1000'**

**else:**

**x=rs[n-1][0]**

**a=int(x[2:])**

**AD\_ID='Ad'+str(a+1)**

**P\_ID = input("Enter the Patient ID : ")**

**S\_ID = input("Enter the Staff ID : ")**

**R\_ID = input("Enter The Accomodation ID : ")**

**v=(AD\_ID,P\_ID,S\_ID,R\_ID)**

**sql='Insert into Admission(Ad\_ID,P\_ID,S\_ID,R\_ID) values(%s,%s,%s,%s);'**

**cur.execute(sql,v)**

**sql='Update admission set P\_Name=(select P\_Name from Patients where P\_ID=%s),\**

**P\_phno=(select P\_Phno from Patients where P\_ID=%s);'**

**v=(P\_ID,P\_ID)**

**cur.execute(sql,v)**

**sql='Update admission set S\_Name=(select S\_Name from Staff where S\_ID=%s);'**

**v=(S\_ID,)**

**cur.execute(sql,v)**

**import datetime as dt**

**date=dt.date.today()**

**time=dt.datetime.now()**

**sql='Update admission set Ad\_Date=%s,Ad\_Time=%s where Ad\_ID=%s;'**

**v=(date,time,AD\_ID)**

**cur.execute(sql,v)**

**print("Patient Admitted Successfully")**

**print("Your Admission ID is ",AD\_ID)**

**x=2**

**elif choice=='2':**

**AD\_ID =input("Enter the Admission ID : ")**

**import datetime as dt**

**date=dt.date.today()**

**time=dt.datetime.now()**

**sql='Update admission set Dis\_Date=%s,Dis\_Time=%s where Ad\_ID=%s;'**

**v=(date,time,AD\_ID)**

**cur.execute(sql,v)**

**print("Patient Discharged Successfully")**

**x=2**

**elif choice=='3':**

**AD\_ID=input("Enter The Admission Id : ")**

**cur=con.cursor()**

**sql="select exists (select \* from admission\**

**where AD\_Id=%s)"**

**ids=(AD\_ID,)**

**cur.execute(sql,ids)**

**rs=cur.fetchall()**

**if rs[0][0]==0:**

**print("Invalid Key")**

**else:**

**sql='select \* from admission where AD\_ID=%s'**

**ids=(AD\_ID,)**

**cur.execute(sql,ids)**

**r=cur.fetchall()**

**for i in r:**

**print("Admission ID : ",i[0])**

**print("Patient ID : ",i[1])**

**print("Patient Name : ",i[2])**

**print("Patient Phone Number : ",i[3])**

**print("Staff ID : ",i[4])**

**print("Staff Name : ",i[5])**

**print("Accomodation ID : ",i[6])**

**print("Appointment Date : ",i[7])**

**print("Appoitment Time : ",i[8])**

**if i[9]==None:**

**print("Patient Not Yet Discharged")**

**else:**

**print("Discharge Date ; ",i[9])**

**print("Discharge Time : ",i[10])**

**x=2**

**elif choice=='4':**

**print("Returning To Previous Menu")**

**x=1**

**else:**

**print("Invalid Choice")**

**x=2**

**elif ch=='7':**

**x=2**

**while x==2 and con.is\_connected():**

**print("-------------------------------------")**

**print("| 1:Pharmacy Billing |")**

**print("| 2:Service Billing |")**

**print("| 3:Admission Charges |")**

**print("| 4:Final Invoice |")**

**print("| 5:Change Status |")**

**print("| 6:View Accounts |")**

**print("| 7:Return To Main Menu |")**

**print("-------------------------------------")**

**ch=input("Enter Your Choice : ")**

**if ch in ['1','2','3','4']:**

**P\_ID=input("Enter The Patient ID : ")**

**sql="select exists (select \* from patients\**

**where P\_ID=%s);"**

**cur.execute(sql,(P\_ID,))**

**rs=cur.fetchall()**

**if rs[0][0]==0:**

**print("Patient Record Does Not Exist")**

**continue**

**else:**

**sql="select exists (select P\_ID from Billing where P\_ID=%s);"**

**cur.execute(sql,(P\_ID,))**

**r=cur.fetchall()**

**if r[0][0]==0:**

**sql='insert into Billing(P\_ID) values(%s);'**

**cur.execute(sql,(P\_ID,))**

**else:**

**pass**

**if ch=='1':**

**sum=0**

**x=3**

**while x==3:**

**Med\_ID=input("Enter The Medicine ID : ")**

**sql="select exists (select \* from pharmacy\**

**where Med\_Id=%s)"**

**cur.execute(sql,(Med\_ID,))**

**rs=cur.fetchall()**

**if rs[0][0]==0:**

**print("Invalid Medicine ID")**

**x=2**

**else:**

**Qty=int(input("Enter The Quantity : "))**

**sql='select Med\_Price from Pharmacy where Med\_ID=%s;'**

**v=(Med\_ID,)**

**cur.execute(sql,v)**

**r=cur.fetchall()**

**p=r[0][0]**

**sum+=(p\*Qty)**

**sql='update Billing\**

**Set M\_Price=M\_Price+%s\**

**where P\_ID=%s;'**

**cur.execute(sql,(sum,P\_ID))**

**ch=input(("Do You Want to Continue? - Y or N-"))**

**if ch.upper()=='Y':**

**continue**

**elif ch.upper()=='N':**

**x=2**

**else:**

**print("Invalid Choice")**

**print('Returning to Previous Menu')**

**x=2**

**elif ch=='2':**

**sum=0**

**x=3**

**while x==3:**

**S\_ID=input("Enter The Service ID : ")**

**sql="select exists (select \* from services\**

**where S\_ID=%s)"**

**cur.execute(sql,(S\_ID,))**

**rs=cur.fetchall()**

**if rs[0][0]==0:**

**print("Invalid Service ID")**

**x=2**

**else:**

**Qty=int(input("Enter The Quantity : "))**

**sql='select S\_Price from Services where S\_ID=%s;'**

**v=(S\_ID,)**

**cur.execute(sql,v)**

**r=cur.fetchall()**

**p=r[0][0]**

**sum+=(p\*Qty)**

**sql='update Billing\**

**Set S\_Price=S\_Price+%s\**

**where P\_ID=%s;'**

**cur.execute(sql,(sum,P\_ID))**

**ch=input(("Do You Want to Continue? - Y or N-"))**

**if ch.upper()=='Y':**

**continue**

**elif ch.upper()=='N':**

**x=2**

**else:**

**print("Invalid Choice")**

**print('Returning to Previous Menu')**

**x=2**

**elif ch=='3':**

**AD\_ID=input("Enter The Admission ID :")**

**sql="select exists (select \* from admission\**

**where AD\_Id=%s)"**

**cur.execute(sql,(AD\_ID,))**

**rs=cur.fetchall()**

**if rs[0][0]==0:**

**print("Invalid Admission ID")**

**x=2**

**else:**

**Ad\_charge=int(input("Enter The Admission Charge : "))**

**R\_rent=int(input("Enter The Room Charge : "))**

**sql='select Ad\_date,Dis\_date from Admission where Ad\_ID=%s and Dis\_date is NOT NULL;'**

**cur.execute(sql,(AD\_ID,))**

**r=cur.fetchall()**

**A\_date=r[0][0]**

**D\_date=r[0][1]**

**sql='select datediff(%s,%s);'**

**cur.execute(sql,(D\_date,A\_date))**

**r=cur.fetchall()**

**n=r[0][0]**

**sum=Ad\_charge+(R\_rent\*n)**

**sql='update Billing\**

**Set Ad\_Price=Ad\_Price+%s\**

**where P\_ID=%s;'**

**cur.execute(sql,(sum,P\_ID))**

**x=2**

**elif ch=='4':**

**sql='select \* from patients where P\_ID=%s'**

**cur.execute(sql,(P\_ID,))**

**r=cur.fetchall()**

**for i in r:**

**P\_Name=i[1]**

**P\_Ads=i[4]**

**P\_Phno=i[5]**

**sql='select M\_Price,S\_Price,Ad\_Price from Billing\**

**where P\_ID=%s;'**

**cur.execute(sql,(P\_ID,))**

**r=cur.fetchall()**

**Mpr=r[0][0]**

**Spr=r[0][1]**

**Adpr=r[0][2]**

**total=Mpr+Spr+Adpr**

**tax=int(input("Enter The Percentage Tax : "))**

**gtotal=total+(total\*tax/100)**

**d = {'|1': ["Pharmacy",Mpr,'|'],**

**'|2': ["Services",Spr,'|'],**

**'|3': ["Admission",Adpr,'|']}**

**import datetime as dt**

**date=dt.date.today()**

**time=dt.datetime.now()**

**ti=time.strftime("%X")**

**l=len(P\_Name)**

**m=len(P\_Ads)**

**n=len(P\_Phno)**

**a=len(str(total))**

**b=len(str(tax))**

**c=len(str(gtotal))**

**print("+----------------------------------------------------------------------------+")**

**print("| HOSPITAL |")**

**print("|",date ,' ', ti,'|')**

**print("|Name : ", P\_Name,(66-l)\*' ','|')**

**print("|Address : ",P\_Ads,(63-m)\*' ','|')**

**print("|Phone Number : ",P\_Phno,(58-n)\*' ','|')**

**print("{:<8} {:<15} {:<51} {}".format('|S.No','Department','Total Bill','|'))**

**for k, v in d.items():**

**Dept,Total,x=v**

**print("{:<8} {:<15} {:<51} {}".format(k,Dept,Total,x))**

**print("+----------------------------------------------------------------------------+")**

**print("|Total Amount : ",total,(58-a)\*' ','|')**

**print("|Tax : ",tax,'%',(65-b)\*' ','|')**

**print("|Amount Payable : ",gtotal,(56-c)\*' ','|')**

**print("+----------------------------------------------------------------------------+")**

**sql='update Billing\**

**set T\_Price=%s\**

**where p\_ID=%s;'**

**cur.execute(sql,(gtotal,P\_ID))**

**x=2**

**elif ch=='5':**

**P\_ID=input('Enter The Patient ID : ')**

**sql="select exists (select \* from patients\**

**where P\_ID=%s);"**

**cur.execute(sql,(P\_ID,))**

**rs=cur.fetchall()**

**if rs[0][0]==0:**

**print("Patient Record Does Not Exist")**

**else:**

**sql='Select \* from Billing where P\_ID =%s;'**

**cur.execute(sql,(P\_ID,))**

**r=cur.fetchall()**

**if len(r)!=0:**

**print('Are You Sure That You Want to Update The Status')**

**k=input('Input Your choice - Y or N :')**

**if k.upper()=='Y':**

**import datetime as dt**

**date=dt.date.today()**

**sql='insert into Accounts(BDate,P\_ID) values(%s,%s);'**

**cur.execute(sql,(date,P\_ID))**

**sql='update Accounts A\**

**Inner Join Billing B ON A.P\_ID = B.P\_ID\**

**set A.P\_Price=B.M\_Price,\**

**A.S\_Price=B.S\_Price,\**

**A.Ad\_Price=B.Ad\_Price,\**

**A.T\_Price=B.T\_Price;'**

**cur.execute(sql)**

**sql='Delete from Billing\**

**Where P\_ID = %s;'**

**cur.execute(sql,(P\_ID,))**

**print("Status Updated Successfully")**

**elif k.upper()=='N':**

**x=2**

**else:**

**print('Invalid Choice')**

**x=2**

**elif len(r)==0:**

**sql="select exists (select \* from ACCOUNTS\**

**where P\_ID=%s);"**

**cur.execute(sql,(P\_ID,))**

**rs=cur.fetchall()**

**if rs[0][0]==0:**

**print('Payment Record Does not exist')**

**else:**

**print('Status has Already been Updated')**

**elif ch=='6':**

**print("-----------------------------------------")**

**print("| View Accounts of |")**

**print("| 1: Particular Day |")**

**print("| 2: Range of Days |")**

**print("| 3: Back to Previous Menu |")**

**print("-----------------------------------------")**

**k=input('Enter Your Choice : ')**

**if k =='1':**

**A\_Year=input("Enter The Year : ")**

**A\_Month=input("Enter The Month : ")**

**A\_Day=input("Enter The Day : ")**

**A\_Date=A\_Year+'-'+A\_Month+'-'+A\_Day**

**sql='select \* from ACCOUNTS\**

**where BDate=%s;'**

**cur.execute(sql,(A\_Date,))**

**r=cur.fetchall()**

**if len(r)==0:**

**print('No Payments Accounted on',A\_Date)**

**elif len(r)>0:**

**print('+----------------------------------------------------------------------------------+')**

**print("{:<8}{:<15}{:<15}{:<15}{:<15}{:<15}{:<19}".format('|','Patient Id','Pharmacy','Service','Admission','Total Bill','|'))**

**for i in r:**

**d = {'|': [i[1],i[2],i[3],i[4],i[5],'|']}**

**for k, v in d.items():**

**P\_id,MP,SP,AP,TP,x=v**

**print("{:<8}{:<15}{:<15}{:<15}{:<15}{:<15}{:<15}".format(k,P\_id,MP,SP,AP,TP,x))**

**x=2**

**print('+----------------------------------------------------------------------------------+')**

**elif k=='2':**

**A\_Year=input("Enter The Year : ")**

**A\_Month=input("Enter The Month : ")**

**A\_Day=input("Enter The Day : ")**

**Date1=A\_Year+'-'+A\_Month+'-'+A\_Day**

**A\_Year=input("Enter The Year : ")**

**A\_Month=input("Enter The Month : ")**

**A\_Day=input("Enter The Day : ")**

**Date2=A\_Year+'-'+A\_Month+'-'+A\_Day**

**sql='select \* from ACCOUNTS\**

**where BDate between %s and %s;'**

**cur.execute(sql,(Date1,Date2))**

**r=cur.fetchall()**

**if len(r)==0:**

**print('No Payments Accounted between ',Date1 , 'and', Date2)**

**else:**

**print('+-------------------------------------------------------------------------------------------------+')**

**print("{:<8}{:<15}{:<15}{:<15}{:<15}{:<15}{:<15}{:<15}".format('|','Date','Patient Id','Pharmacy','Service','Admission','Total Bill','|'))**

**print('+-------------------------------------------------------------------------------------------------+')**

**for i in r:**

**d = {'|': [ str(i[0]),i[1],i[2],i[3],i[4],i[5],'|']}**

**for k, v in d.items():**

**da,P\_id,MP,SP,AP,TP,x=v**

**print("{:<8}{:<15}{:<15}{:<15}{:<15}{:<15}{:<15}{:<15}".format(k,da,P\_id,MP,SP,AP,TP,x))**

**print('+-------------------------------------------------------------------------------------------------+')**

**x=2**

**elif k=='3':**

**x=2**

**else:**

**print('Invalid Choice')**

**print('Returning To Previous Menu')**

**x=2**

**elif ch=='7':**

**print('Returning Previous Menu')**

**x=1**

**else:**

**print('Invaild Choice')**

**print('Returning To Previous Menu')**

**x=1**

**elif ch=='8':**

**print("Returning To Main Menu")**

**x=0**

**break**

**else:**

**print("Invalid Choice")**

**print("Re-Enter Valid Choice")**

**x=1**

**else:**

**print("Incorrect Password ")**

**print("Please Enter The Correct Password ")**

**x=0**

**elif choice=='2':**

**print("Exitting From Software")**

**break**

**else:**

**print("Invalid Choice")**

**print("Enter 1 or 2")**