**PROGRAM CODE:-**

import mysql.connector as sql

conn=sql.connect(host='localhost',user='root',password='riddhika',database='hospital')

if conn.is\_connected():

cursor=conn.cursor()

def about():

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

print("YOU ARE WORKING IN OUR HOSPITAL MANAGEMENT SYSTEM PROJECT. IT HAS 20 OPTIONS TO RUN.")

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

def all\_patients\_details():

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

cursor.execute("Select\* from hospital.Patients\_table")

data=cursor.fetchall()

count=cursor.rowcount

print("Total no. of rows retrieved in resultset :", count)

for row in data:

print(row)

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

def all\_doctors\_details():

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

cursor.execute("select \* from hospital.doctor")

data=cursor.fetchall()

count=cursor.rowcount

print("Total no. of rows retrieved in resultset :",count)

for row in data:

print(row)

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

def search\_patient():

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

iD=input("Enter patient's ID whose details are to be displayed:")

cursor.execute("select \* from hospital.Patients\_table where Patients\_Id=%s"%(iD))

dataa=cursor.fetchone()

if dataa is None:

print("Not valid ID!")

else:

print(dataa)

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

def search\_doctor():

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

Id=input("Enter the doctor's id whose details are required:")

cursor.execute("select \* from hospital.doctor where Doctors\_id=%s"%(Id))

data=cursor.fetchone()

if data is None:

print("Not valid ID!")

else:

print(data)

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

def treatments\_available():

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

cursor.execute("select \* from hospital\_.treatment")

data=cursor.fetchall()

for i in data:

print(i)

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

def lab\_tests\_available():

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

cursor.execute("select \* from hospital.lab")

data=cursor.fetchall()

for i in data:

print(i)

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

def adm\_and\_dis():

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

cursor.execute("select \* from hospital\_.admission\_and\_discharging")

dataa=cursor.fetchall()

for i in dataa:

print(i)

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

def pharmacy():

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

cursor.execute("select \* from hospital\_.pharmacy")

data=cursor.fetchall()

for i in data:

print(i)

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

def adjoin\_patient():

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

Patients\_id=input('Enter id of patient:')

Patients\_name=input('Enter patient name:')

Symptoms=input('Enter symptoms of patient(Press l for list of symptoms):')

if Symptoms=="l":

sym\_list()

Symptoms=input('Enter symptoms of patient : ')

Adm\_date=input('Enter admission date:')

disch\_date=input('Enter discharge date:')

Treatment,Disease,Dname,Doctors\_id=doctor\_assign(Symptoms)

cursor.execute("select medicines from hospital\_.pharmacy where Disease='{}'".format(Disease))

medicines=cursor.fetchone()[0]

Ward\_no=input('Enter ward no.of patient:')

cursor.execute("select test from hospital.lab where Disease='{}'".format(Disease))

Tests=cursor.fetchone()[0]

sql\_insert='insert into hospital.Patients\_table(Patients\_id,Patients\_name,Symptoms,Doctors\_ID,Adm\_date,disch\_date,medicines,Ward\_no,Tests,Disease,Treatment) values (%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s)'

val=(Patients\_id,Patients\_name,Symptoms,Doctors\_id,Adm\_date,disch\_date,medicines,Ward\_no,Tests,Disease,Treatment)

cursor.execute(sql\_insert,val)

print('registered new patient')

conn.commit()

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

def adjoin\_doctor():

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

Doctors\_id=input('Enter id of doctor:')

Doctors\_name=input('Enter doctor name:')

Treatment=input('Enter treatment given by doctor:')

Consultation\_fees=float(input('Enter consultation fees of doctor:'))

Disease=input('Enter disease treated by doctor:')

sql\_insert='insert into hospital.doctor(Doctors\_id,Doctors\_name,Treatment,Consultation\_fees,Disease) values (%s,%s,%s,%s,%s)'

val=(Doctors\_id,Doctors\_name,Treatment,Consultation\_fees,Disease)

cursor.execute(sql\_insert,val)

print('registered new doctor')

conn.commit()

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

def update\_doctor():

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

while True:

Doctors\_id=input('Enter id of doctor:')

Doctors\_name=input('Enter updated doctors name:')

Treatment=input('Enter updated treatment given by doctor:')

Consultation\_fees=float(input('Enter updated consultation fees of doctor:'))

Disease=input('Enter updated disease treated by doctor:')

val=[Doctors\_name,Treatment,Consultation\_fees,Disease,Doctors\_id]

upd='update hospital.doctor set Doctors\_name=%s,Treatment=%s,Consultation\_fees=%s,Disease=%s where Doctors\_id=%s'

cursor.execute(upd,val)

conn.commit()

break

cursor.execute('select \* from hospital.doctor')

data=cursor.fetchall()

for i in data:

print(i)

print('Record Updated')

conn.commit()

def update\_patient():

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

while True:

Patients\_Id=input('Enter id of patient:')

Patients\_name=input('Enter updated patients name:')

Adm\_date=input('Enter updated admission date:')

disch\_date=input('Enter updated discharge date:')

val=[Patients\_name,Adm\_date,disch\_date,Patients\_Id]

upd='update hospital\_.patients\_table set Patients\_name=\"'+Patients\_name+'\",Adm\_date=\"'+Adm\_date+'\",disch\_date=\"'+disch\_date+'\"where Patients\_id=\"'+Patients\_Id+'\" ;'

cursor.execute(upd)

conn.commit()

break

cursor.execute('select \* from hospital.Patients\_table where Patients\_id=\"'+Patients\_Id+'\";')

data=cursor.fetchall()

for i in data:

print(i)

print('Record Updated')

conn.commit()

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

def sym\_list():

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

print("The list of symptoms is-")

print("1.Back pain,sore muscles")

print("2.Bloody vomit,fatigue,nausea")

print("3.Swelling in groin, bulge in groin")

print("4.Swelling of breasts,nipple discharge")

print("5.Chest pain,palpitations,abnormal heart rhythms")

print("6.Bloody urine,swollen extremities,puffy eyes")

print("7.Vertigo,mental confusion,headaches")

print("8.Excessive urination,weight loss,increased hunger")

print("9.Neck swelling,weight gain,breath shortness")

print("10.Inability to smell & taste,cold & cough,fever")

print("11.Runny nose,cough,headaches,fever,stomach ache,chicken pox,diarhhoea,dengue")

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

def provide\_medication():

sym\_list()

Symptoms=input("Enter the patient's symptoms:")

a,b,c,d=doctor\_assign(Symptoms)

print("You are suffering with",b,",the Patient will have to be admitted asap !\nPlease choose option 10.\n the treatment that will be provided to you is",a,"and the doctor apoointed to you is",c)

def search\_patientopd():

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

ppid=input("Enter the patient's id whose details are required:")

cursor.execute("select \* from hospital\_.opd where Patients\_id=%s"%(ppid))

data=cursor.fetchone()

if data is None:

print("Invalid patient id")

else :

print(data)

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

def admit\_patientopd():

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

while True:

Sno=int(input("Enter the serial no."))

dID=int(input("Enter doctor's ID:"))

Name=input("Enter the doctor's name:")

pid=input("Enter patient's id:")

pname=input("Enter patient's name:")

disease\_=input("Enter the disease required to be treated:")

Med=input("Enter the Medicines to treat the respective disease:")

bill=int(input("Enter the total bill of the medicines:"))

querry="insert into hospital\_.opd values({},{},'{}',{},'{}','{}','{}',{})".format(Sno,dID,Name,pid,pname,disease\_,Med,bill)

cursor.execute(querry)

conn.commit()

ch=input("Enter more records?(y/n)")

if ch in 'Nn':

break

cursor.execute("select \* from hospital\_.opd")

data=cursor.fetchall()

for i in data:

print(i)

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

def search\_detailsED():

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

Id=input("Enter the patient's id whose details are required:")

cursor.execute("select \* from hospital\_.Emergency where Patient\_ID=%s"%(Id))

data=cursor.fetchone()

if data is None:

print("Invalid patient id")

else :

print(data)

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

def add\_patientED():

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

while True:

sno=int(input("Enter the serial no."))

ID=int(input("Enter Patients ID:"))

name=input("Enter the Patients name:")

treat\_=input("Enter the respective treatment:")

tests\_=input("Enter the required tests:")

expenses\_=input("Enter the expenses of treatment:")

query="insert into hospital\_.Emergency values({},{},'{}','{}','{}',{})".format(sno,ID,name,treat\_,tests\_,expenses\_,)

cursor.execute(query)

conn.commit()

ch=input("Enter more records?(y/n)")

if ch in 'Nn':

break

cursor.execute("select \* from hospital\_.Emergency")

data=cursor.fetchall()

for i in data:

print(i)

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

def search\_adm\_and\_dis():

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

P\_ID=int(input("Enter the patient's ID whose admission and discharging dates you want to know:"))

cursor.execute("Select Adm\_date,disch\_date from hospital\_.admission\_and\_discharging where patients\_ID=%s"%format(P\_ID))

data=cursor.fetchall()

count=cursor.rowcount

print("Total no. of rows retrieved in resultset :", count)

for row in data:

print(row)

else:

print("Unauthentic Patient ID")

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

def doctor\_assign(Symptoms):

if Symptoms in ["Back pain,sore muscles"]:

Treatment="Physiotherapy"

Disease="Arthritis"

Doctor="Dr. Meera Shah"

cursor.execute('select doctors\_id from hospital.doctor where doctors\_name="'+Doctor+'";')

Doctors\_id=cursor.fetchone()[0]

return Treatment,Disease,Doctor,Doctors\_id

elif Symptoms in ["Bloody vomit,fatigue,nausea"]:

Treatment="Radiation therapy"

Disease="Prostate cancer"

Doctor="Dr. Rajeev Saxena"

cursor.execute('select doctors\_id from hospital.doctor where doctors\_name="'+Doctor+'";')

Doctors\_id=cursor.fetchone()[0]

return Treatment,Disease,Doctor,Doctors\_id

elif Symptoms in ["Swelling in groin,bulge in groin"]:

Treatment="General surgery"

Disease="Hernia"

Doctor="Dr. Rahul Jain"

cursor.execute('select doctors\_id from hospital.doctor where doctors\_name="'+Doctor+'";')

Doctors\_id=cursor.fetchone()[0]

return Treatment,Disease,Doctor,Doctors\_id

elif Symptoms in ["Swelling of breasts,nipple discharge"]:

Treatment="Chemotherapy"

Disease="Breast cancer"

Doctor="Dr. Manish Singh"

cursor.execute('select doctors\_id from hospital.doctor where doctors\_name="'+Doctor+'";')

Doctors\_id=cursor.fetchone()[0]

return Treatment,Disease,Doctor,Doctors\_id

elif Symptoms in ["Chest pain,palpitations,abnormal heart rhythms"]:

Treatment="Angioplasty"

Disease="Heart bypass"

Doctor="Dr.Chetan Gupta"

cursor.execute('select doctors\_id from hospital.doctor where doctors\_name="'+Doctor+'";')

Doctors\_id=cursor.fetchone()[0]

return Treatment,Disease,Doctor,Doctors\_id

elif Symptoms in ["Bloody urine,swollen extremities,puffy eyes"]:

Treatment="Dialysis"

Disease="Kidney failure"

Doctor="Dr. Aditi Mishra"

cursor.execute('select doctors\_id from hospital.doctor where doctors\_name="'+Doctor+'";')

Doctors\_id=cursor.fetchone()[0]

return Treatment,Disease,Doctor,Doctors\_id

elif Symptoms in ["Vertigo,mental confusion,headaches"]:

Treatment="Neurosurgery"

Disease="Brain tumour"

Doctor="Tushar Singh"

cursor.execute('select doctors\_id from hospital.doctor where doctors\_name="'+Doctor+'";')

Doctors\_id=cursor.fetchone()[0]

return Treatment,Disease,Doctor,Doctors\_id

elif Symptoms in ["Excessive urination,weight loss,increased hunger"]:

Treatment="Medication"

Disease="Diabetes"

Doctor="Dr. Manoj Kumar"

cursor.execute('select doctors\_id from hospital.doctor where doctors\_name="'+Doctor+'";')

Doctors\_id=cursor.fetchone()[0]

return Treatment,Disease,Doctor,Doctors\_id

elif Symptoms in ["Neck swelling,weight gain,breath shortness"]:

Treatment="Thyroidectomy"

Disease="Goiter"

Doctor="Dr.Priya Sharma"

cursor.execute('select doctors\_id from hospital.doctor where doctors\_name="'+Doctor+'";')

Doctors\_id=cursor.fetchone()[0]

return Treatment,Disease,Doctor,Doctors\_id

elif Symptoms in ["Inability to smell & taste,cold & cough,fever"]:

Treatment="ECMO"

Disease="COVID-19"

Doctor=" Vipin Rajput"

cursor.execute('select doctors\_id from hospital.doctor where doctors\_name="'+Doctor+'";')

Doctors\_id=cursor.fetchone()[0]

return Treatment,Disease,Doctor,Doctors\_id

elif Symptoms in ["Runny nose,cough,headaches,fever,stomach ache,chicken pox,diarhhoea,dengue"]:

Treatment="General medication"

Disease="Basic diseases that can be treated with proper medication"

Doctor="Dr. Manoj Kumar"

cursor.execute('select doctors\_id from hospital.doctor where doctors\_name="'+Doctor+'";')

Doctors\_id=cursor.fetchone()[0]

return Treatment,Disease,Doctor,Doctors\_id

def billing():

sym\_list()

Number\_of\_days\_of\_treatment=(int(input("Enter the no. of days for which treatment continued:")))

Symptoms=input("Enter the patient's symptoms:")

if Symptoms in ["Back pain,sore muscles"]:

Treatment="Physiotherapy"

D="Arthritis"

Doctor="Dr. Meera Shah"

print("The patient will have to be admitted asap! Please choose option 11")

elif Symptoms in ["Bloody vomit,fatigue,nausea"]:

Treatment="Radiation therapy"

D="Prostate cancer"

Doctor="Dr. Lata Mehra"

print("The patient will have to be admitted asap! Please choose option 11")

elif Symptoms in ["Swelling in groin,bulge in groin"]:

Treatment="General surgery"

D="Hernia"

Doctor="Dr. Rahul Jain"

print("The patient will have to be admitted asap! Please choose option 11")

elif Symptoms in ["Swelling of breasts,nipple discharge"]:

Treatment="Chemotherapy"

D="Breast cancer"

Doctor="Dr. Manish Singh"

print("The patient will have to be admitted asap! Please choose option 11")

elif Symptoms in ["Chest pain,palpitations,abnormal heart rhythms"]:

Treatment="Angioplasty"

D="Heart bypass"

Doctor="Dr.Chetan Gupta"

print("The patient will have to be admitted asap! Please choose option 11")

elif Symptoms in ["Bloody urine,swollen extremities,puffy eyes"]:

Treatment="Dialysis"

D="Kidney failure"

Doctor="Dr. Aditi Mishra"

print("The patient will have to be admitted asap! Please choose option 11")

elif Symptoms in ["Vertigo,mental confusion,headaches"]:

Treatment="Neurosurgery"

D="Brain tumour"

Doctor="Tushar Singh"

print("The patient will have to be admitted asap! Please choose option 11")

elif Symptoms in ["Excessive urination,weight loss,increased hunger"]:

Treatment="Medication"

D="Diabetes"

Doctor="Dr. Manoj Kumar"

print("The patient will have to be admitted asap! Please choose option 11")

elif Symptoms in ["Neck swelling,weight gain,breath shortness"]:

Treatment="Thyroidectomy"

D="Goiter"

Doctor="Dr.Priya Sharma"

print("The patient will have to be admitted asap! Please choose option 11")

elif Symptoms in ["Inability to smell & taste,cold & cough,fever"]:

Treatment="ECMO"

D="COVID-19"

Doctor=" Vipin Rajput"

elif Symptoms in ["Runny nose,cough,headaches,fever,stomach ache,chicken pox,diarhhoea,dengue"]:

Treatment="General medication"

D="Basic diseases that can be treated with proper medication"

Doctor="Dr. Manoj Kumar"

else:

print("Sorry, we're unable to provide you proper treatment in this hospital. Kindly refer somewhere else, we hope u have a healthy life ahead!")

print("You are suffering with",D

,",the treatment that will be provided to you is",Treatment,"and the doctor apoointed to you is",Doctor)

sql="Select lab.Fees,doctor.Consultation\_fees from hospital.lab,hospital.doctor where lab.Disease=doctor.Disease and lab.Disease=\""+D+"\";"

cursor.execute(sql)

data=cursor.fetchone()

fees=data[0]

cfees=data[1]

cursor.execute("Select Cost from hospital\_.pharmacy where Disease='{}'".format(D))

dataa=cursor.fetchone()

for i in dataa:

bill2=i

cursor.execute("Select Fees from hospital\_.treatment where Disease='{}'".format(D))

dat=cursor.fetchone()

for a in dat:

bill3=a

print(" Consultation fees :\t",cfees)

print(" LAB FEE :\t",fees)

print(" Cost of Medicines :\t",bill2)

print(" Treatment fees :\t",bill3)

Bill=(fees+cfees+bill2+bill3)\*Number\_of\_days\_of\_treatment

print("The total bill of patient is \t",Bill)

c="Y"

while c =="Y" or c=="y":

print("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_MENU\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_")

print("Welcome to our Hospital")

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

print("HOSPITAL MANAGEMENT SYSTEM")

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

print("1.ABOUT US ")

print("2.ALL PATIENTS' DETAILS")

print("3.ALL DOCTORS' DETAILS")

print("4.SEARCH PATIENT DETAILS")

print("5.SEARCH DOCTOR DETAILS")

print("6.TREATMENTS AVAILABLE")

print("7.LAB TESTS AVAILABLE")

print("8.ADMISSION & DISCHARGE RECORD")

print("9.PHARMACY")

print("10.ADJOIN NEW PATIENT")

print("11.ADJOIN NEW DOCTOR")

print("12.UPDATE DOCTOR DETAILS")

print("13.UPDATE PATIENT DETAILS")

print("14.PROVIDE MEDICATION")

print("15.SEARCH PATIENT IN OPD")

print("16.ADMIT PATIENT IN OPD")

print("17.SEARCH PATIENT IN ED")

print("18.ADD PATIENT IN ED")

print("19.SEARCH ADMISSION & DISCHARGE")

print("20.BILL DETAILS")

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

if ch==1:

about()

elif ch==2:

all\_patients\_details()

elif ch==3:

all\_doctors\_details()

elif ch==4:

search\_patient()

elif ch==5:

search\_doctor()

elif ch==6:

treatments\_available()

elif ch==7:

lab\_tests\_available()

elif ch==8:

adm\_and\_dis()

elif ch==9:

pharmacy()

elif ch==10:

adjoin\_patient()

elif ch==11:

adjoin\_doctor()

elif ch==12:

update\_doctor()

elif ch==13:

update\_patient()

elif ch==14:

provide\_medication()

elif ch==15:

search\_patientopd()

elif ch==16:

admit\_patientopd()

elif ch==17:

search\_detailsED()

elif ch==18:

add\_patientED()

elif ch==19:

search\_adm\_and\_dis()

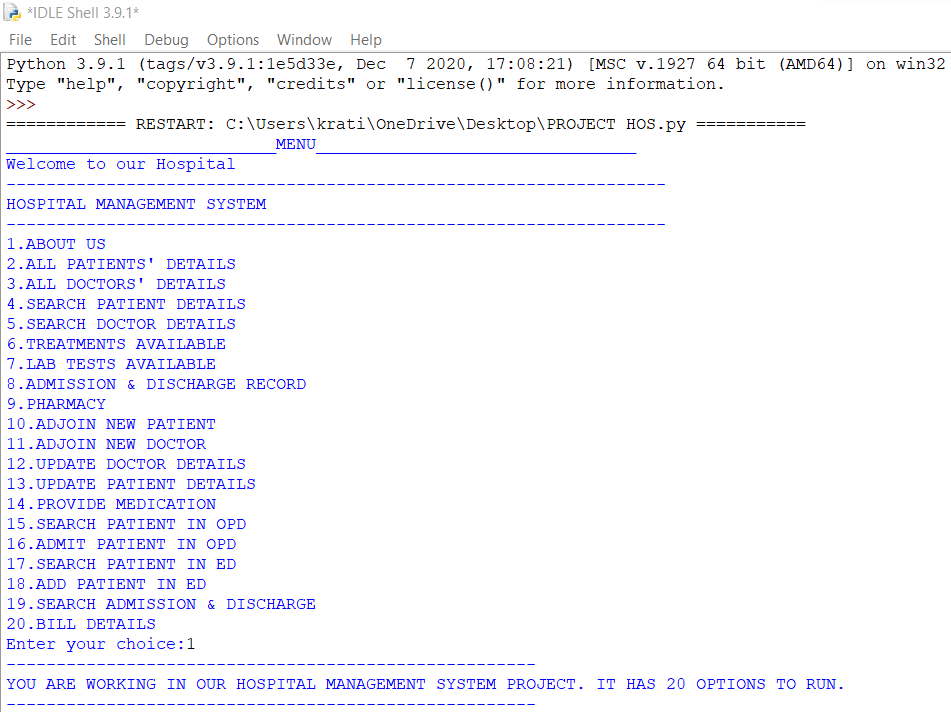
elif ch==20:

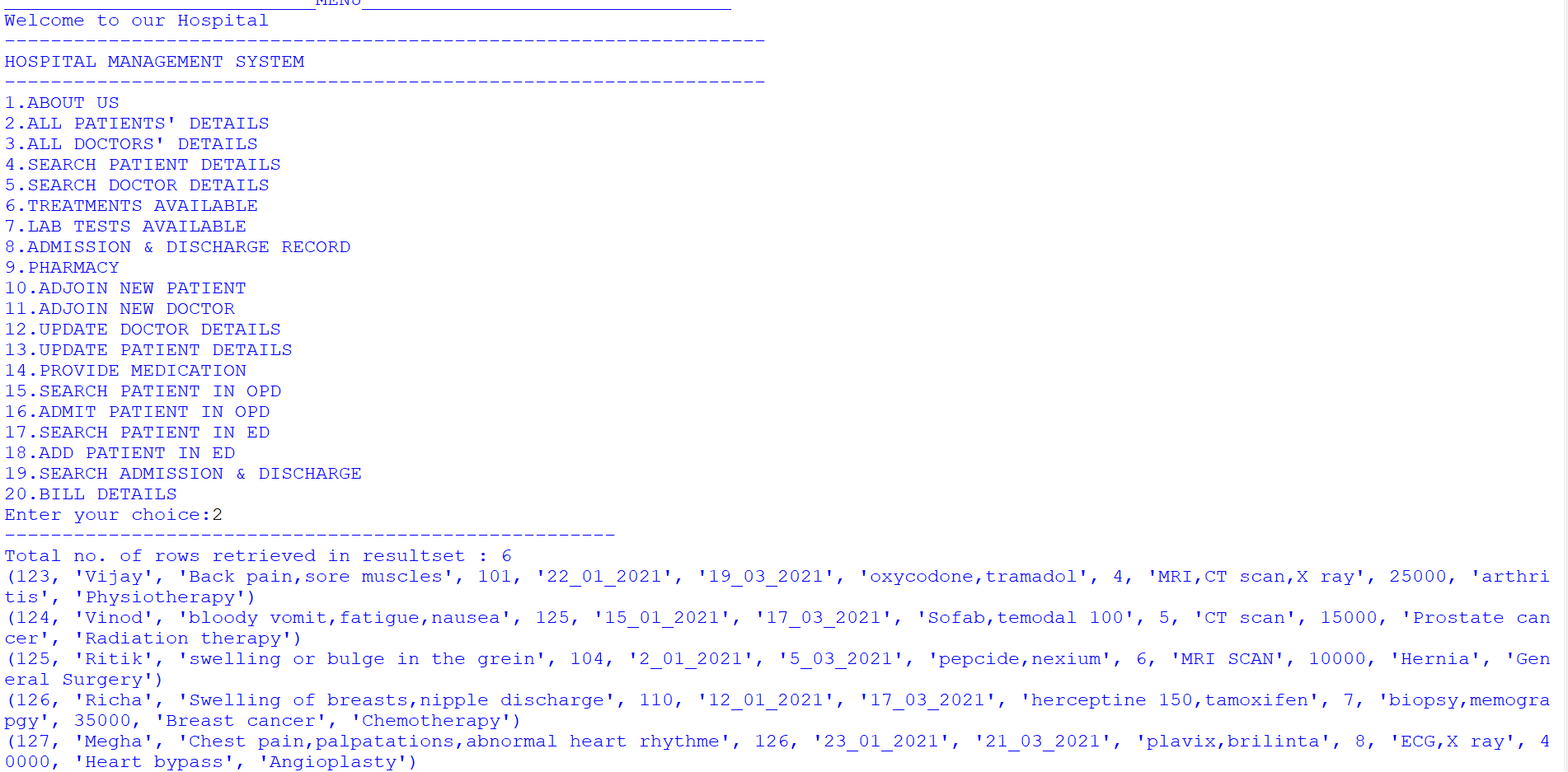
billing()

c=input("Do you want to continue?")

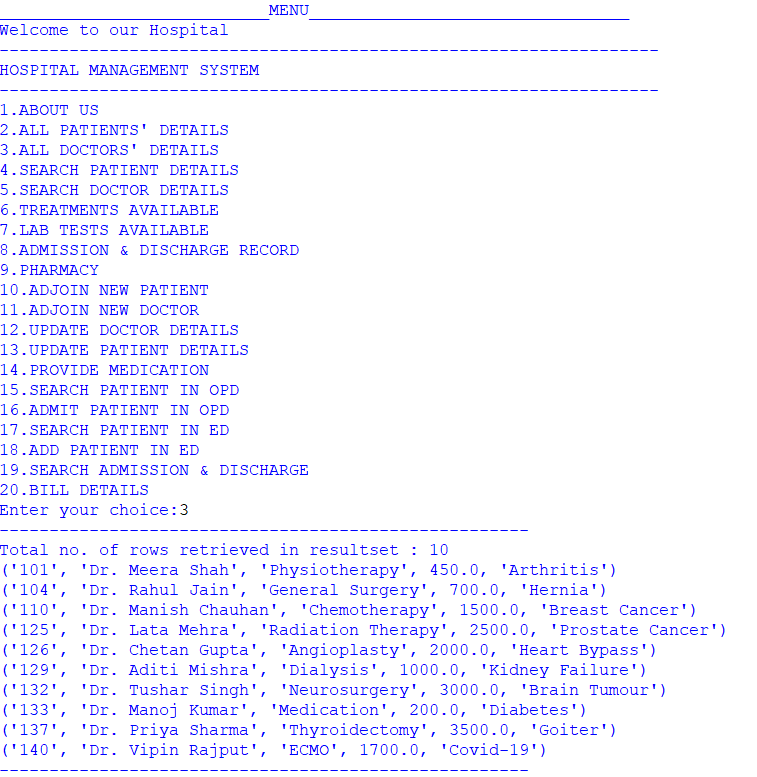
**OUTPUT:-**

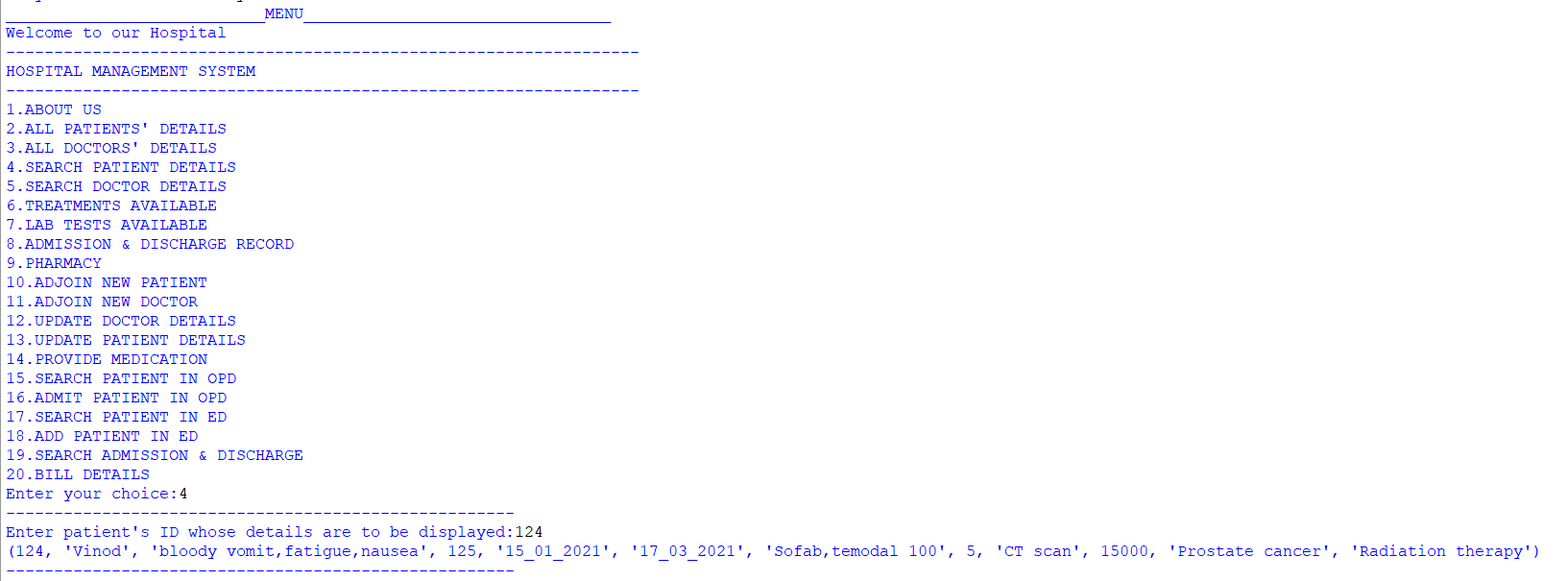
**ABOUT US-**



**PATIENT DETAILS-**

**DOCTOR DETAILS-**



**SEARCH PATIENT DETAILS-**

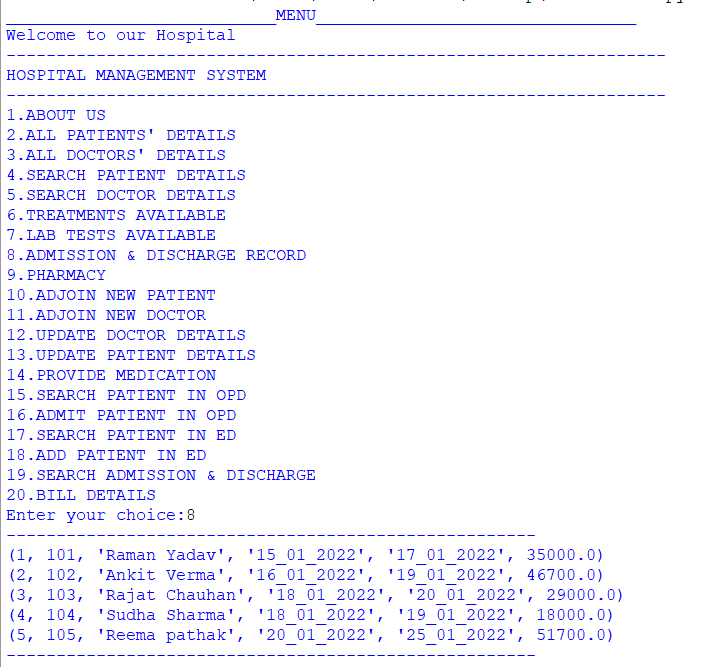
**TREATMENTS AVAILABLE-**



**LAB TESTS AVAILABLE-**



**ADMISSION AND DISCHARGE RECORD-**



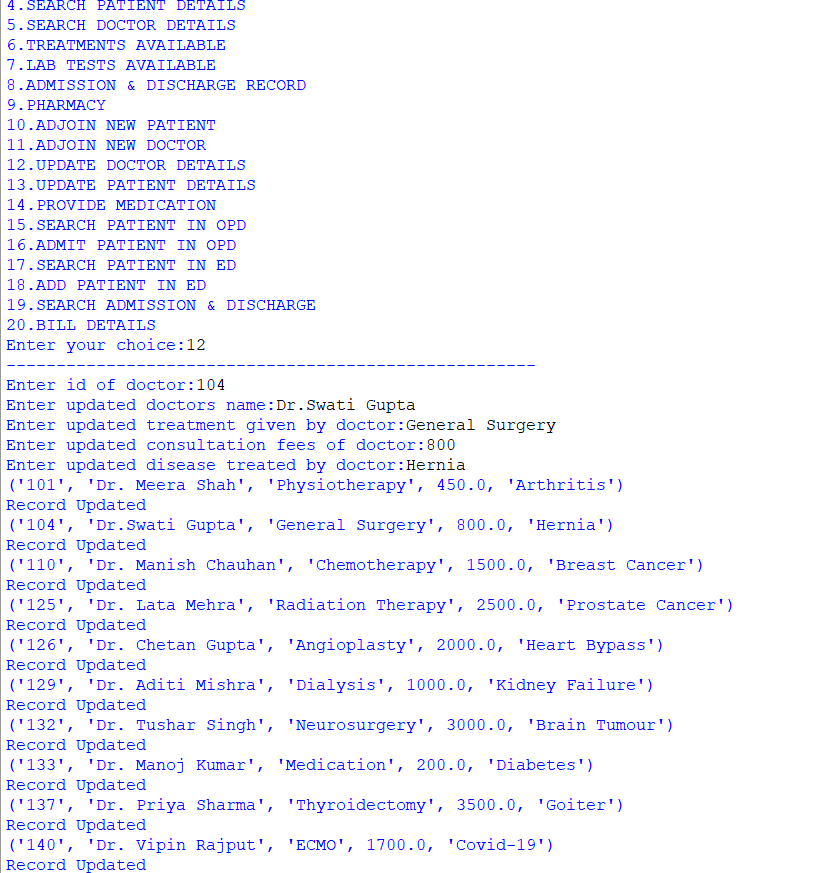
**PHARMACY-**

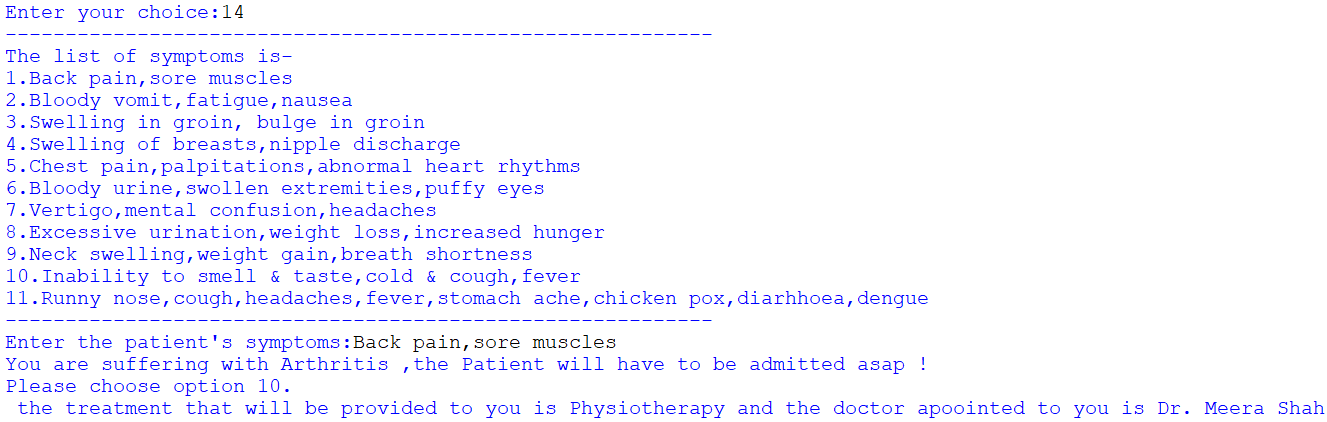


**ADJOIN NEW PATIENT-**

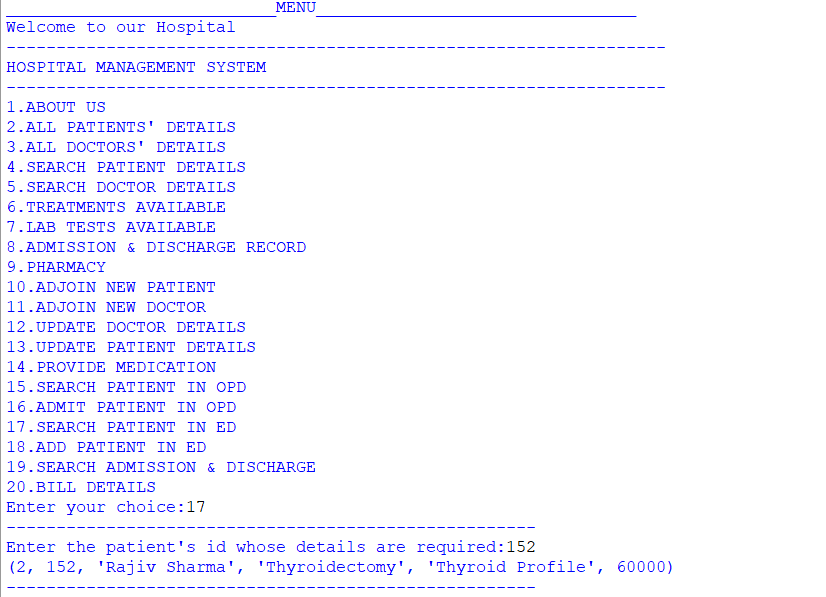


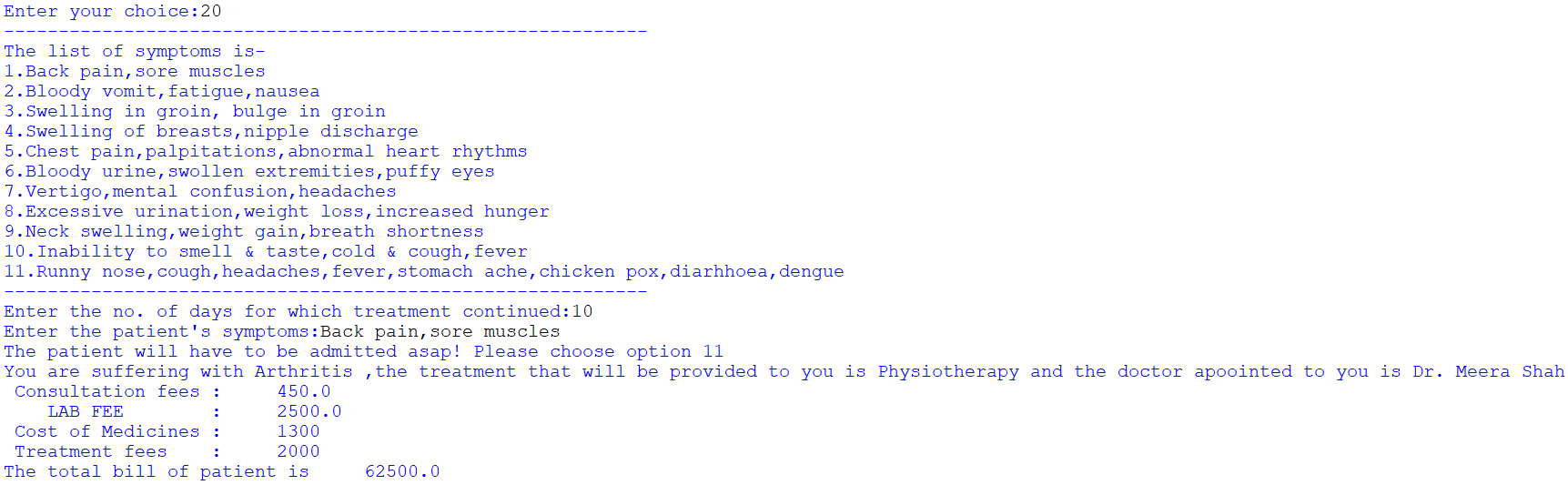
**UPDATE DOCTOR DETAILS-**



**PROVIDE MEDICATION-**

**SEARCH PATIENT IN EMERGENCY DEPARTMENT-**



**BILL DETAILS-**