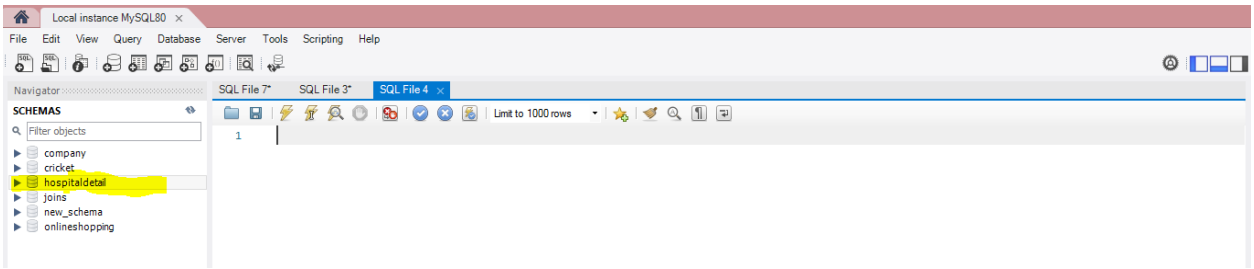
REPORT ON HOSPITAL MANAGEMENT SYSTEM BY USING MYSQL DATABASE AND PYTHON

- 1. To connect between python and MYSQL Database and create Database Name i.e 'hospitaldetail' the in MYSQL database .

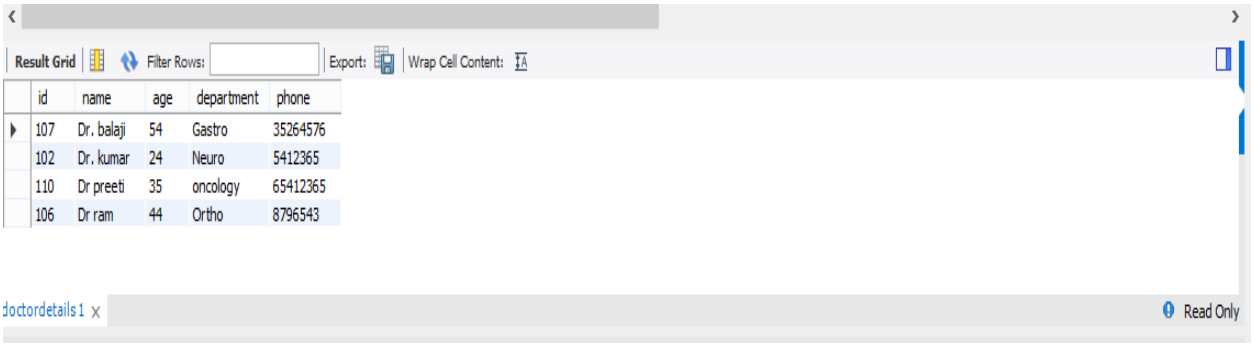
```
import matplotlib.pyplot as plt
 import mysql.connector
import pandas as pd
from matplotlib import style
mydb = mysql.connector.connect(
host="localhost",
user="root",
 password="Wash@1234"
)
mycursor = mydb.cursor()
mycursor.execute("create database  hospitaldetail")
```



- **To create DoctorDetails table inserting values on the created table**

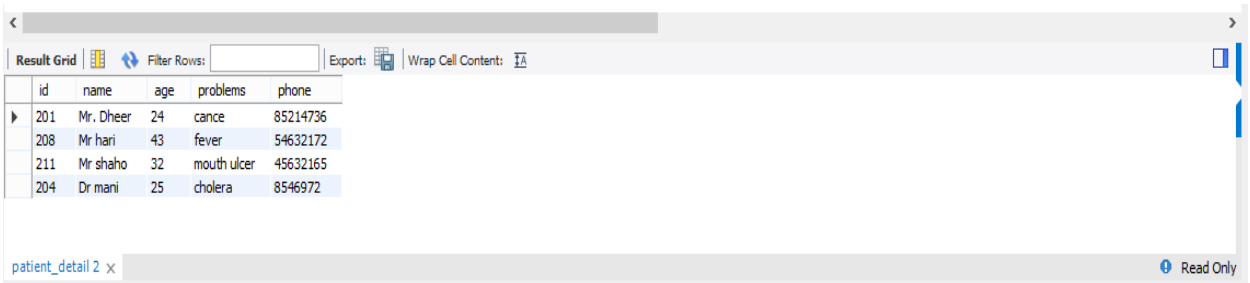
```
import matplotlib.pyplot as plt
import mysql.connector
import pandas as pd
from matplotlib import style
mydb = mysql.connector.connect(
    host="localhost",
    user="root",
    password="Wash@1234",
    database='hospitaldetail'
)
mycursor = mydb.cursor()
```

```
print('''          ******************
        ************************************
*******PROJECT ON HOSPITAL MANAGEMENT SYSTEM********
          ************************************
                 ********************''')
print('You are working in HOSPITAL MANAGEMENT SYSTEM PROJECT ')

def doctor_table():
    # to create table
    mycursor.execute("CREATE TABLE doctordetails (id int ,name
VARCHAR(255),age int, department VARCHAR(255),phone int )")


def desc_doctor_details():
    print("show the structure of doctor details table ")
    df = pd.read_sql("describe  doctordetails", mydb)
    print(df)


def insert_doctor_details():
    print("Enter the details of new doctor")
    id = int(input("Enter ID of doctor: "))
    name = input("Enter doctor name: ")
    age = int(input("Enter age: "))
    department = input("Enter the department: ")
    phone = int(input("Enter phone number: "))
    sql = f"INSERT INTO doctordetails VALUES
('{id}','{name}','{age}','{department}','{phone}')"
    mycursor.execute(sql)
    print("Registred new doctor")
    mydb.commit()


def show_record_doctor_details():
    print("All record of doctors")
    df = pd.read_sql("select * from doctordetails ",mydb)
    print(df)
```



❖ **To create PatientDetails table inserting values on the created table**

```
def create_patient_details():
    print("create table for patients")
    mycursor.execute(
        "CREATE TABLE patient_detail (id int ,name VARCHAR(255),age int,
problems  VARCHAR(255),phone int(15))")
    print("table created")


def desc_patient_details():
    print("show the structure of patient details table ")
    df = pd.read_sql("describe  patient_detail", mydb)
    print(df)


def insert_patient_details():
    print("Enter new patient information")
    id = int(input("Enter ID of patient: "))
    name = input("Enter patient name: ")
    age = int(input("Enter age: "))
    problems = input("Enter the problem: ")
    phone = int(input("Enter phone number: "))
    sql = f"INSERT INTO patient_detail VALUES
('{id}','{name}','{age}','{problems}','{phone}')"
    mycursor.execute(sql)
    print("succesfully registrated")
    mydb.commit()


def show_record_patient_details():
    print("Record of all patients")
    df = pd.read_sql("select * from patient_detail ",mydb)
    print(df)
```



❖ **To create WorkerDetails table inserting values on the created table**

```
def create_worker_details():
    print("create table for worker ")
    mycursor.execute(
        "CREATE TABLE worker_detail (id int ,name VARCHAR(255),age int,
```

```
workname  VARCHAR(255),phone int(15))")
    print("table created")

def desc_worker_details():
    print("show the structure of worker details table ")
    df = pd.read_sql("describe  worker_detail", mydb)
    print(df)


def insert_worker_details():
    print("Enter new worker information")
    id = int(input("Enter ID of worker: "))
    name = input("Enter worker name: ")
    age = int(input("Enter age: "))
    workname = input("Enter the workname: ")
    phone = int(input("Enter phone number: "))
    sql = f"INSERT INTO worker_detail VALUES
('{id}','{name}','{age}','{workname}','{phone}')"
    mycursor.execute(sql)
    print("succesfully registrated")
    mydb.commit()


def show_record_worker_details():
    print("Record of all worker")
    df = pd.read_sql("select * from worker_detail ",mydb)
    print(df)
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

id	name	age	workname	phone
301	Mrs,.gita	27	cleaner	87564981
302	Mr suresh	38	Security gurd	54138522
304	Mr shahani	56	operator	85469876

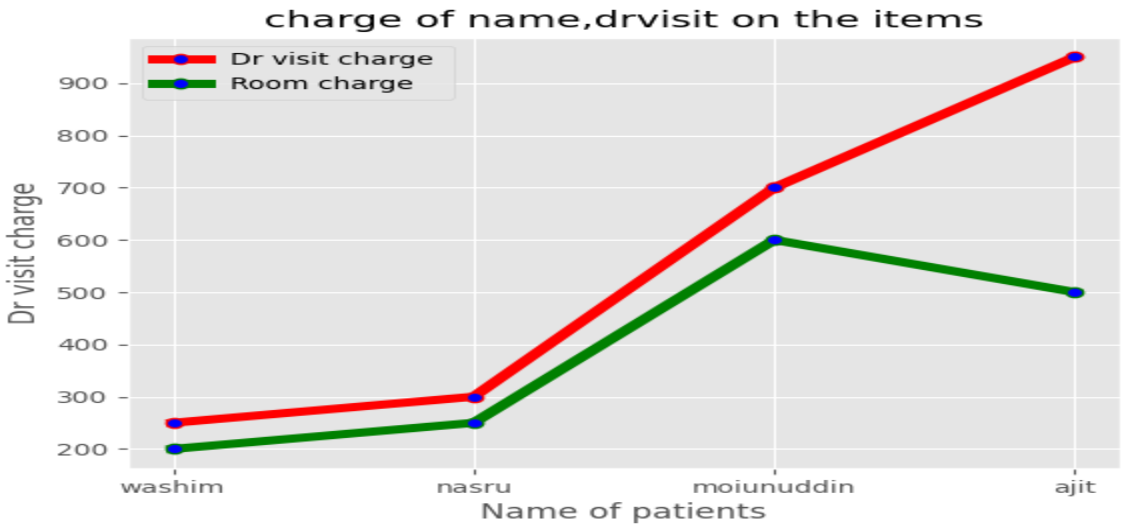
- **To calculate total bill**

```
def totalbill():
    print("Record of charge without totaling Bill")
    print()
    df = pd.read_sql("select * from bill", mydb)
    print(df)
    print()
    column_list = list(df)
    print(column_list)
    print()
    print("Record of charge with totaling Bill")
    df = pd.read_sql("SELECT *, (drvisit + medicine + room) AS totalbill
```

```
FROM bill",mydb)
    print(df)
    id       name  age  drvisit medicine  room
0  450     washim   21      250      550   200
1  451      nasru   27      300      450   250
2  355  moiunuddin   36      700      800   600
3  366       ajit   44      950      950   500

['id', 'name', 'age', 'drvisit', 'medicine', 'room']

Record of charge with totaling Bill
    id       name  age  drvisit medicine  room  totalbill
0  450     washim   21      250      550   200     1000.0
1  451      nasru   27      300      450   250     1000.0
2  355  moiunuddin   36      700      800   600     2100.0
3  366       ajit   44      950      950   500     2400.0

Process finished with exit code 0
```

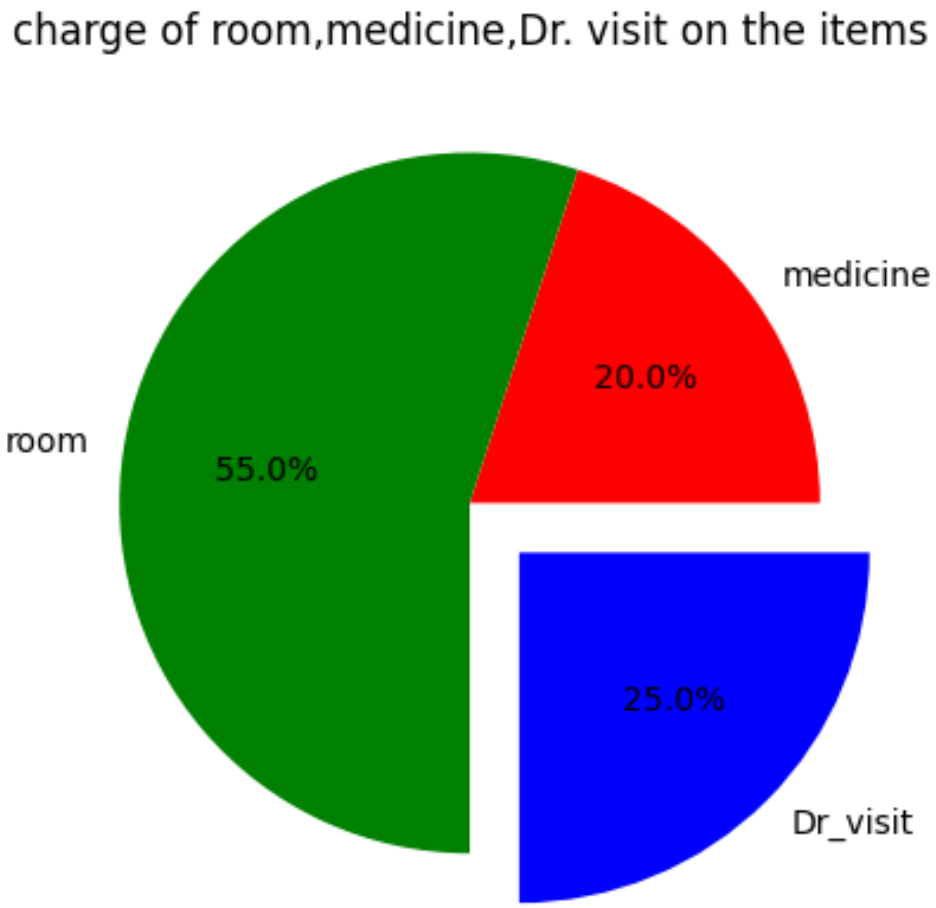
- **Line chart Name of patients and Dr visit charge**

```
def line_plot():
    print("line plot")
    df = pd.read_sql("select * from bill", mydb)
    x1 = df['name']
    y1 = df['drvisit']
    y2 = df['room']
    style.use("ggplot")
    plt.title('charge of name,drvisit on the items')
    plt.xlabel("Name of patients")
    plt.ylabel("Dr visit charge")
    plt.plot(x1, y1, color='r', linewidth=5, marker='o',
markerfacecolor="blue",label="Dr visit charge ")
    plt.plot(x1, y2, color='g', linewidth=5, marker='o',
markerfacecolor="blue",label='Room charge')
    plt.legend(loc=0)
    plt.show()
```



Pie-chart

```
def pie_plot():
    print("pie plot")
    df = pd.read_sql("select * from bill", mydb)
    print(df)
    plt.title('charge of room,medicine,Dr. visit on the items')
    Total_Exp =eval(input("Enter charge of room,medicine,Dr visit in sq
brackets:"))
    color = ['red', 'green', 'blue']
    items = ['medicine', 'room', 'Dr_visit']
    exp1 = [0, 0, 0.2]
    plt.pie(Total_Exp,colors=color, labels=items, explode=exp1,
autopct='%5.1f%%')
    plt.show()
```



❖ **Bar chart**

```
def bar plot():
    print("Bar plot")
    df=pd.read_sql("select * from bill",mydb)
    x1=df['name']
    y1=df['medicine']
    plt.xlabel('patent name',fontsize=14,color="r")
    plt.xlabel('medicine', fontsize=14, color="r")
    plt.title("paid for madicine",fontsize=14,color='blue')
    plt.xticks(fontsize=14,rotation=30)
    plt.bar(x1,y1,width=0.5,facecolor='r',edgecolor='green')
    plt.show()
```