



HOTEL RESORT GUEST DATA ORGANIZER

A Project Report Submitted
in Partial Fulfilment of the Requirements

AISSCE - All India Senior School Certificate
Examination
2020-2021: SCIENCE – XII A

In
COMPUTER SCIENCE (083)

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**MERIDIAN SCHOOL, MADHAPUR
NOVEMBER, 2020
UNDERTAKING**

WE take great pride to declare that this project
“HEALTH RESORT GUEST DATA ORGANIZER”
submitted to **Mrs. SIRISHA GUNNALA** for the **CBSE -
AISSE class XII certificate**. We have not plagiarized the
Project for the Certificate. In case found guilty of any
wrong doing, we accept that our Certificates may be
unconditionally withdrawn.

November, 2020
Place: MERIDIAN SCHOOL
MADHAPUR

CERTIFICATE

I, Sirisha gunnala, Certify the project titled **“HEALTH RESORT GUEST DATA ORGANIZER”** by:

“Taman Kolanupaka, Venkata Narayana, Viswa teja thota”, has been carried out under my guidance.

Sirisha Gunnala
Computer Science Teacher
Meridian school Madhapur

ACKNOWLEDGEMENTS

We are deeply indebted to our teacher and supporter,
Mrs. Sirisha Gunnala

We would want to take this Chance to thank our
Parents, our school and cbse for providing us with this
opportunity.

ATLAST we would like to thank all our teachers,
Mrs.Sirisha Gunnala and my team.

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1. Introduction of the Project.
2. System Requirements of the Project.
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INTRODUCTION OF THE PROJECT

We the students of **CLASS XII A of Meridian School, Madhapur** have been assigned the Project **HEALTH RESORT GUEST DATA ORGANIZER**

Together, we worked as a Group to do the programming, coding and Debugging.

The project starts with –

1--->ENTER CUSTOMER DETAILS

2--->SEARCH FOR A CUSTOMER

3--->BOOKING RECORD

4--->CALCULATE ROOM RENT

5--->CALCULATE RESTUARANT BILL

6--->DISPLAY ALL CUSTOMER DETAILS

7--->GENERATE TOTAL BILL AMOUNT

8--->DELETE A CUSTOMER

9--->ANALYSE THE AMOUNT SPEND BY ALL CUSTOMERS CATEGORY WISE

10--->UPDATE CUSTOMER DETAILS

11--->EXIT

We are grateful to be given such an opportunity which wouldn't have been possible without the much-needed help from our teacher Mrs. Sirisha gunnala.

The Project has been a valid insight of how programming works in the future. We are hopeful that the code will help Hotel groups, Organize guest data more efficiently and easily.

PROCESS

- 1-We have done the planning in a paper work related to the project **HOTEL RESORT GUEST DATA ORGANIZER.**
- 2- We discussed our plan with our subject teacher
- 3-We started our project's foundation with our subject teacher.
- 4-We started the code input stage known as programming the project.
- 5-We debugged the code.
- 6-We prepared the project format as shown above.

SYSTEM REQUIREMENTS OF THE PROJECT

Recommended System Requirements

Processors: Intel® Core™ i3 processor 4300M at 2.60 GHz.

Disk space: 2 to 4 GB.

Operating systems: Windows® 10, MACOS, and UBUNTU.

Python Versions: 3.X.X or Higher.

Minimum System Requirements

Processors: Intel Atom® processor or Intel® Core™ i3 processor.

Disk space: 1 GB.

Operating systems: Windows 7 or later, MACOS, and UBUNTU.

Python Versions: 2.7.X, 3.6.X.

Prerequisites before installing MySQL Connector Python

You need root or administrator privileges to perform the installation process.

Python must be installed on your machine.

Note: – MySQL Connector Python requires python to be in the system's PATH. Installation fails if it doesn't find Python.

On Windows, If Python doesn't exist in the system's PATH, please manually add the directory containing python.exe yourself.

PYTHON CODING

```
import pandas as pd
import matplotlib.pyplot as plt
import sqlalchemy as sq
from sqlalchemy import create_engine
engine = create_engine("mysql+mysqlconnector://root:#####@localhost/hotel")
connection = engine.connect()
con=sq.engine

#MAIN SCREEN
print("\n***** MERIDIAN SCHOOL *****")

print("\n***** HOTEL MANAGEMENT *****")

print("\n*****Designed and Maintained By: Venkata Narayana , Taman Kolanupaka , Vishwa Teja" )

print("*****")

#STARTING POINT OF THE SYSTEM

# MODULE TO CREATE NEW CUSTOMER

def newCustomer():
    global cid
    if connection:
        createTable ="CREATE TABLE IF NOT EXISTS CUSTOMER_DETAILS( CID
varchar(10) NOT NULL,C_NAME VARCHAR(20) NOT NULL,C_AGE varchar(5) NOT
NULL,C_ADDRESS VARCHAR(60) NOT NULL,C_COUNTRY varchar(15) NOT
NULL,C_EMAIL VARCHAR(30) NOT NULL,C_CONTACT VARCHAR(12) NOT NULL);"
        engine.execute(createTable)
        print("\nPlease Fill All The Information Carefully !")
        cid = input("Enter the Customer ID Number : ")
        name = input("Enter Customer Name : ")
        age= input("Enter Customer Age : ")
        address = input("Enter Customer Address : ")
        country = input("Enter Customer Country : ")
        email = input("Enter Customer Email : ")
        phone= input("Enter Customer Contact Number : ")
        df=
pd.DataFrame({'CID':[cid],'C_Name':[name],'C_AGE':[age],'C_ADDRESS':[address],'C_COU
NTRY':[country],'C_EMAIL':[email],'C_CONTACT':[phone]})
        df.to_sql('CUSTOMER_DETAILS', con=engine, index=False,if_exists='append')
        custs= engine.execute("SELECT * FROM CUSTOMER_DETAILS").fetchall()
        print(custs)
        print("\n New Customer Added Successfully !")

#MODULE TO SEARCH FOR CUSTOMER

def searchCustomer():
```

```

global cid
if connection:
    cid=input("ENTER CUSTOMER ID : ")
    query="SELECT * FROM CUSTOMER_DETAILS WHERE CID= %s"
    result = engine.execute(query,(cid,)).fetchall()
    if result:
        print(result)

df=pd.DataFrame(result,columns=['CID','C_Name','C_AGE','C_ADDRESS','C_COUNTRY','C_EMAIL','C_CONTACT'])
print(df)
return True

else:
    print("Record Not Found Try Again !")
    return False

```

#MODULE TO BOOK ROOM FOR CUSTOMER

```

def bookingDetails():
    global cid
    customer=searchCustomer()
    if customer:
        if connection:
            createTable ="CREATE TABLE IF NOT EXISTS BOOKING_DETAILS(CID
varchar(10) NOT NULL,CHECK_IN date NOT NULL ,CHECK_OUT date NOT NULL)"
            engine.execute(createTable)
            checkin=input("\n Enter Customer CheckIN Date [ YYYY-MM-DD ] : ")
            checkout=input("\n Enter Customer CheckOUT Date [ YYYY-MM-DD ] : ")
            df= pd.DataFrame({'CID':[cid],'CHECK_IN':[checkin],'CHECK_OUT':[checkout]})
            df.to_sql('BOOKING_DETAILS', con=engine, index=False,if_exists='append')
            booking_details= engine.execute("SELECT * FROM BOOKING_DETAILS").fetchall()
            print(booking_details)
            print("\nCHECK-IN AND CHECK-OUT ENTRY SUCCESSFULLY UPDATED !")

```

MODULE TO CALCULATE ROOM_RENT

```

def RoomRent():
    global cid
    customer=searchCustomer()
    if customer:
        global roomrent
        if connection:
            createTable ="CREATE TABLE IF NOT EXISTS ROOM_RENT(CID VARCHAR(10)
NOT NULL,ROOM_CHOICE int(11) NOT NULL,NO_OF_DAYS int(11) NOT
NULL,ROOM_NO int(11) NOT NULL,ROOM_RENT int(11) NOT NULL);"
            engine.execute(createTable)
            print ("\n ##### We have The Following Rooms For You #####")
            print (" 1. Presidential ----> 25000 Rs.")
            print (" 2. Royal      ----> 10000 Rs. ")
            print (" 3. Elite       ----> 5000 Rs. ")
            print (" 4. Budget      ----> 3000 Rs. ")
            roomchoice =int(input("Enter Your Option : "))

```

```

roomno=int(input("Enter Customer Room No : "))
noofdays=int(input("Enter No. Of Days : "))
if roomchoice==1:
    roomrent = noofdays * 25000
    print("\nPresidential Room Rent : ",roomrent)

elif roomchoice==2:
    roomrent = noofdays * 10000
    print("\nRoyal Room Rent : ",roomrent)

elif roomchoice==3:
    roomrent = noofdays * 5000
    print("\nElite Royal Room Rent : ",roomrent)

elif roomchoice==4:
    roomrent = noofdays * 3000
    print("\nBudget Room Rent : ",roomrent)

else:
    print("Sorry ,May Be You Are Giving Me The Wrong Input, Please Try Again !!! ")
    return
df=
pd.DataFrame({'CID':[cid],'ROOM_CHOICE':[roomchoice],'NO_OF_DAYS':[noofdays],'ROOM_NO':[roomno],'ROOM_RENT':[roomrent]})
df.to_sql('ROOM_RENT', con=engine, index=False,if_exists='append')
rooms= engine.execute("SELECT * FROM ROOM_RENT").fetchall()
print(rooms)
print("\nThank You , Your Room Has Been Booked For : ",noofdays , "Days" )
print("\nYour Total Room Rent is : Rs. ",roomrent)

```

MODULE TO CALCULATE RESTUARANT BILL

```

def RestaurantBill():
    global cid
    customer=searchCustomer()
    if customer:
        global restaurantbill
        if connection:
            createTable ="CREATE TABLE IF NOT EXISTS RESTAURANT_DETAILS(CID
VARCHAR(10) NOT NULL,CUISINE VARCHAR(30) NOT NULL,QUANTITY int(11) NOT
NULL,BILL int(11) NOT NULL)"
            engine.execute(createTable)
            print("""\n ##### We Welcome you to our restaurant-'FOOD ON FIRE' #####
Here,We strive to serve you food for all your needs,be it
The Proper Indian Thali
The Masala filld Barbeque combo and many more
Choose from our wide range of gourmet style food and appease your tastebuds""")
            print("1. INDIAN VEG THALI -----> 800 Rs.")
            print("2. INDIAN NON-VEG THALI -----> 1000 Rs.")
            print("3. SIZZLER -----> 700 Rs.")
            print("4. BARBEQUE COMBO -----> 1500 Rs.")
            choice_dish = int(input("Enter Your Cusine : "))
            quantity=int(input("Enter Quantity : "))
            if choice_dish==1:

```

```

        print("\nSO YOU HAVE ORDER: INDIAN VEG THALI ")
        restaurantbill = quantity * 800

    elif choice_dish==2:
        print("\nSO YOU HAVE ORDER: INDIAN NON-VEG THALI ")
        restaurantbill = quantity * 1000

    elif choice_dish==3:
        print("\nSO YOU HAVE ORDER: SIZZLER ")
        restaurantbill = quantity * 700

    elif choice_dish==4:
        print("\nSO YOU HAVE ORDER: BARBEQUE COMBO ")
        restaurantbill = quantity * 1500

    else:
        print("Sorry ,May Be You Are Giving Me The Wrong Input, Please Try Again !!! ")
        return

df=pd.DataFrame({'CID':[cid],'CUISINE':[choice_dish],'QUANTITY':[quantity],'BILL':[restaurantbill]})
df.to_sql('RESTAURANT_DETAILS', con=engine, index=False,if_exists='append')
res_bill= engine.execute("SELECT * FROM RESTAURANT_DETAILS").fetchall()
print(res_bill)
print("Your Total Bill Amount Is : Rs. ",restaurantbill)
print("\n\n**** WE HOPE YOU ENJOYED YOUR MEAL ***\n\n")

#MODULE for displaying all customers

def displayAllCustomers():
    global cid
    if connection:
        result = engine.execute("SELECT * FROM CUSTOMER_DETAILS").fetchall()
        if result:

df=pd.DataFrame(result,columns=['CID','C_NAME','C_AGE','C_ADDRESS','C_COUNTRY','C_EMAIL','C_CONTACT'])
        print(df)

    else:
        print("Sorry ! No Record Found , Please Try Again ! ")

#MODULE FOR GENERATING THE TOTAL BILL

def totalCustomerBill():
    global cid
    customer=searchCustomer()
    if customer:
        global grandTotal
        global cname
        global roomrent
        global restaurantbill

```

```

if connection:
    query = "SELECT C.C_NAME NAME,R.ROOM_RENT STAYBILL,RES.BILL FROM
CUSTOMER_DETAILS C JOIN ROOM_RENT R ON (C.CID=R.CID) JOIN
RESTAURANT_DETAILS RES ON (C.CID=RES.CID) WHERE C.CID= %s"
    result = engine.execute(query,(cid,)).fetchall()
    if result:
        df=pd.DataFrame(result,columns=['C_Name','ROOM_RENT','RES_BILL'])
        print(df)
        cname=df.iloc[0]['C_Name']
        roomrent=df.iloc[0]['ROOM_RENT']
        restaurantbill=df.iloc[0]['RES_BILL']
        grandTotal=roomrent + restaurantbill
        print("\n **** THE GRAND TRIDENT HOTEL **** CUSTOMER BILLING ****")
        print("\n CUSTOMER NAME      : " , cname)
        print("\n ROOM RENT          : Rs. " , roomrent)
        print("\n RESTAURANT BILL    : Rs. " , restaurantbill)
        print("_____")
        print("\nTOTAL AMOUNT : Rs. ",grandTotal)
        return True

    else:
        print("Record Not Found Try Again !")
        return False

```

MODULE FOR DELETING A CUSTOMER RECORD

```

def deleteCustomer():
    global cid
    customer=searchCustomer()
    if customer:
        if connection:
            engine.execute('DELETE from CUSTOMER_DETAILS where CID =%s;',(cid,))
            engine.execute('DELETE from ROOM_RENT where CID =%s;',(cid,))
            engine.execute('DELETE from RESTAURANT_DETAILS where CID =%s;',(cid,))
            print("\n***** CUSTOMER AND RELATED DETAILS DELETED SUCCESSFULLY !
*****")

```

MODULE TO UPDATE CUSTOMER DETAILS

```

def updateCustomerDetails():
    global cid
    customer=searchCustomer()
    if customer:
        if connection:
            print("1. UPDATE CUSTOMER NAME")
            print("2. UPDATE CUSTOMER AGE")
            print("3. UPDATE CUSTOMER ADDRESS")
            print("4. UPDATE CUSTOMER COUNTRY")
            print("5. UPDATE CUSTOMER EMAIL")
            print("6. UPDATE CUSTOMER CONTACT")
            change_detail = int(input("Enter Your choice for updatation : "))
            if change_detail==1:
                change_name=input("PLEASE ENTER THE CORRECT NAME : ")

```

```

sql='UPDATE CUSTOMER_DETAILS SET C_NAME = %s where CID =%s'
engine.execute(sql,(change_name,cid))
print("\n***** CUSTOMER NAME UPDATED SUCCESSFULLY! *****")

elif change_detail==2:
    change_age=input("PLEASE ENTER THE CORRECT AGE : ")
    sql='UPDATE CUSTOMER_DETAILS SET C_AGE = %s where CID =%s'
    engine.execute(sql,(change_age,cid))
    print("\n***** CUSTOMER AGE UPDATED SUCCESSFULLY! *****")

elif change_detail==3:
    change_address=input("PLEASE ENTER THE CORRECT ADDRESS : ")
    sql='UPDATE CUSTOMER_DETAILS SET C_ADDRESS = %s where CID =%s'
    engine.execute(sql,(change_address,cid))
    print("\n***** CUSTOMER ADDRESS UPDATED SUCCESSFULLY! *****")

elif change_detail==4:
    change_country=input("PLEASE ENTER THE CORRECT COUNTRY : ")
    sql='UPDATE CUSTOMER_DETAILS SET C_COUNTRY = %s where CID =%s'
    engine.execute(sql,(change_country,cid))
    print("\n***** CUSTOMER COUNTRY UPDATED SUCCESSFULLY! *****")

elif change_detail==5:
    change_email=input("PLEASE ENTER THE CORRECT EMAIL : ")
    sql='UPDATE CUSTOMER_DETAILS SET C_EMAIL = %s where CID =%s'
    engine.execute(sql,(change_email,cid))
    print("\n***** CUSTOMER EMAIL UPDATED SUCCESSFULLY! *****")

elif change_detail==6:
    change_contact=input("PLEASE ENTER THE CORRECT CONTACT : ")
    sql='UPDATE CUSTOMER_DETAILS SET C_CONTACT = %s where CID =%s'
    engine.execute(sql,(change_contact,cid))
    print("\n***** CUSTOMER CONTACT UPDATED SUCCESSFULLY! *****")

else:
    print("Sorry ,May Be You Are Giving Me The Wrong Input, Please Try Again !!! ")
    return

```

MODULE FOR GENERATING GRAPH BY ALL CUSTOMERS ON RESTUARANT AND ROOM

```

def customersWallet():
    if connection:
        query = "SELECT C.C_NAME NAME,R.ROOM_RENT STAYBILL,RES.BILL FROM
CUSTOMER_DETAILS C JOIN ROOM_RENT R ON (C.CID=R.CID) JOIN
RESTAURANT_DETAILS RES ON (C.CID=RES.CID)"
        result = engine.execute(query).fetchall()
        if result:
            df=pd.DataFrame(result,columns=['C_Name','ROOM_RENT','RES_BILL'])
            cname = df['C_Name'].values.tolist()
            rent = df['ROOM_RENT'].values.tolist()
            res_bill = df['RES_BILL'].values.tolist()

```

```

plt.subplot(2,1,1)
plt.bar(cname, rent, color='orange')
plt.xlabel('Customer Name')
plt.ylabel('Room Rent')
plt.title('Customer vs Room Rent')
plt.grid(True)
plt.subplots_adjust(hspace=0.7,wspace=0.7)

```

```

plt.subplot(2,1,2)
plt.bar(cname, res_bill, color='cyan')
plt.xlabel('Customer Name')
plt.ylabel('Restaurant Bill')
plt.title('Customer vs Restaurant Bill')
plt.grid(True)
plt.show()

```

```

else:
    print("Record Not Found Try Again !")
    return False

```

```

def MenuSet():
    c='y'
    while(c=='y'):
        print("\n!=====*****=====!")
        print("""
1--->ENTER CUSTOMER DETAILS

2--->SEARCH FOR A CUSTOMER

3--->BOOKING RECORD

4--->CALCULATE ROOM RENT

5--->CALCULATE RESTUARANT BILL

6--->DISPLAY ALL CUSTOMER DETAILS

7--->GENERATE TOTAL BILL AMOUNT

8--->DELETE A CUSTOMER

9--->ANALYSE THE AMOUNT SPEND BY ALL CUSTOMERS CATEGORY WISE

10--->UPDATE CUSTOMER DETAILS

11--->EXIT""")
        print("\n!=====*****END*****=====!")
        choice = int(input("\n Please Enter Your Choice : "))
        if choice == 1:
            newCustomer()

        elif choice == 2:
            searchCustomer()

        elif choice == 3:

```

```
        bookingDetails()

    elif choice == 4:
        RoomRent()
    elif choice == 5:
        RestaurantBill()

    elif choice==6:
        displayAllCustomers()

    elif choice==7:
        totalCustomerBill()

    elif choice==8:
        deleteCustomer()

    elif choice==9:
        customersWallet()

    elif choice==10:
        updateCustomerDetails()

    elif choice==11:
        print("Exiting")
        break

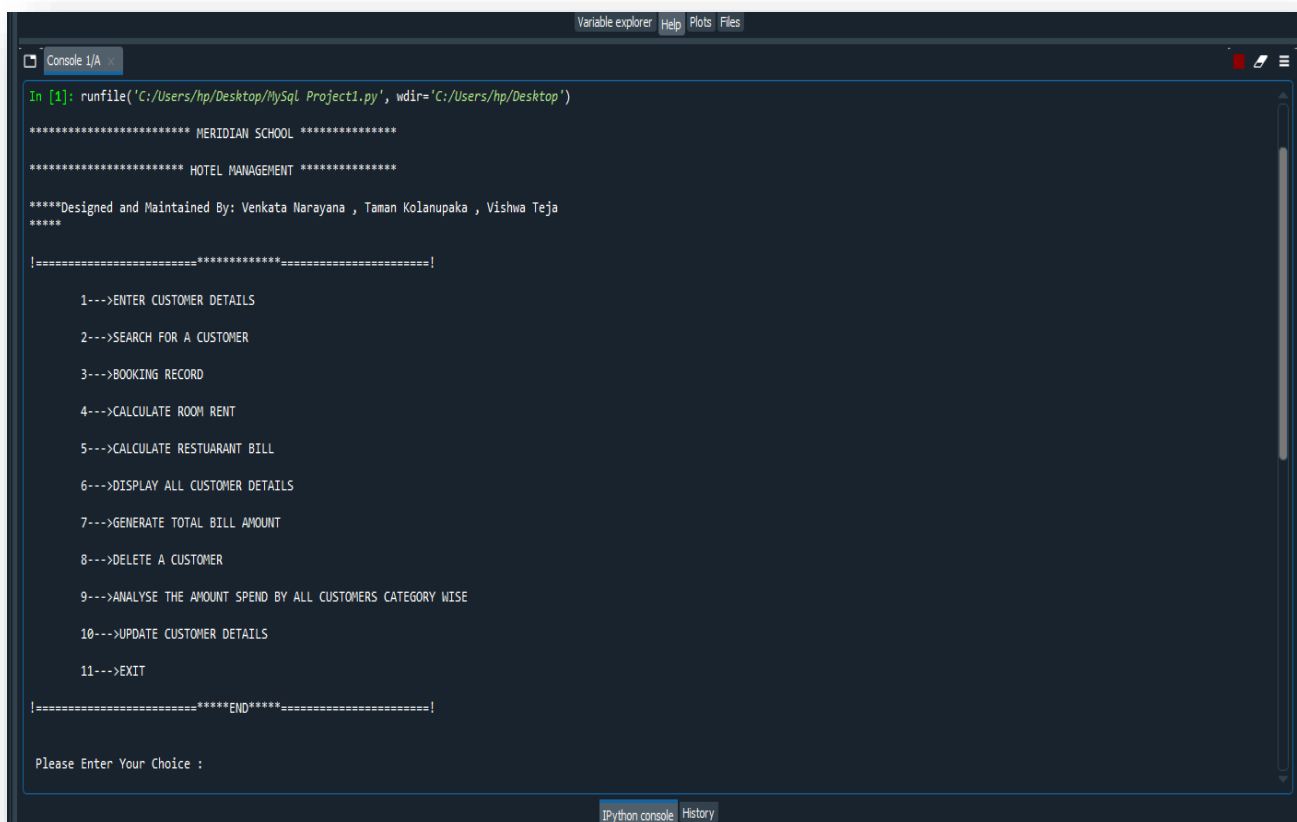
    else:
        print("Sorry ,May Be You Are Giving Me Wrong Input, Please Try Again !!! ")

MenuSet()
```


OUTPUT OF THE CODE

Finally, we conclude our work and present the output of the Project.

MAIN SCREEN



```
In [1]: runfile('C:/Users/hp/Desktop/MySql Project1.py', wdir='C:/Users/hp/Desktop')

***** MERIDIAN SCHOOL *****

***** HOTEL MANAGEMENT *****

*****Designed and Maintained By: Venkata Narayana , Taman Kolanupaka , Vishwa Teja
*****

!=====!

1--->ENTER CUSTOMER DETAILS
2--->SEARCH FOR A CUSTOMER
3--->BOOKING RECORD
4--->CALCULATE ROOM RENT
5--->CALCULATE RESTUARANT BILL
6--->DISPLAY ALL CUSTOMER DETAILS
7--->GENERATE TOTAL BILL AMOUNT
8--->DELETE A CUSTOMER
9--->ANALYSE THE AMOUNT SPEND BY ALL CUSTOMERS CATEGORY WISE
10--->UPDATE CUSTOMER DETAILS
11--->EXIT

!=====*****END*****=====!

Please Enter Your Choice :
```

CUSTOMER DETAILS

```
Variable Explorer | Help | Files | IPython console | History

Console 1/A

0--->DELETE A CUSTOMER

9--->ANALYSE THE AMOUNT SPEND BY ALL CUSTOMERS CATEGORY WISE

10--->UPDATE CUSTOMER DETAILS

11--->EXIT

!=====*****END*****=====!

Please Enter Your Choice : 1

Please Fill All The Information Carefully !

Enter the Customer ID Number : 12345

Enter Customer Name : Siraj

Enter Customer Age : 29

Enter Customer Address : Punjagutta

Enter Customer Country : India

Enter Customer Email : Siraj29@gmail.com

Enter Customer Contact Number : 9281340938
C:\Users\hp\anaconda3\New\lib\site-packages\pandas\io\sql.py:1333: UserWarning: The provided table name 'CUSTOMER_DETAILS' is not found exactly as such in the database after writing the table,
possibly due to case sensitivity issues. Consider using lower case table names.
  warnings.warn(msg, UserWarning)
[('12347', 'Amit', '30', 'Panjagutta,Hyderabad', 'India', 'Amit_am_real@gmail.com', '8924103920'), ('12347', 'Teja', '17', 'Kukatpally', 'India', 'teja17@gmail.com', '8924103920'), ('12345',
'Siraj', '29', 'Punjagutta', 'India', 'Siraj29@gmail.com', '9281340938')]

New Customer Added Successfully !

!=====*****=====!

1--->ENTER CUSTOMER DETAILS
```

DETAILS OF A CUSTOMER

```
Variable explorer Help Plots Files
Console 1/A
4--->CALCULATE ROOM RENT
5--->CALCULATE RESTUARANT BILL
6--->DISPLAY ALL CUSTOMER DETAILS
7--->GENERATE TOTAL BILL AMOUNT
8--->DELETE A CUSTOMER
9--->ANALYSE THE AMOUNT SPEND BY ALL CUSTOMERS CATEGORY WISE
10--->UPDATE CUSTOMER DETAILS
11--->EXIT

!=====END=====!

Please Enter Your Choice : 2

ENTER CUSTOMER ID : 12345
[('12345', 'Siraj', '29', 'Punjagutta', 'India', 'Siraj29@gmail.com', '9281340938')]
CID C_Name C_AGE C_ADDRESS C_COUNTRY C_EMAIL C_CONTACT
0 12345 Siraj 29 Punjagutta India Siraj29@gmail.com 9281340938

!=====!

1--->ENTER CUSTOMER DETAILS
2--->SEARCH FOR A CUSTOMER
3--->BOOKING RECORD
4--->CALCULATE ROOM RENT
5--->CALCULATE RESTUARANT BILL

Python console History
```

BOOKING RECORD

```
Variable explorer Help Plots Files
Console 1/A
11--->EXIT

!=====*****END*****=====!

Please Enter Your Choice : 3

ENTER CUSTOMER ID : 12345
[['12345', 'Siraj', '29', 'Punjagutta', 'India', 'Siraj29@gmail.com', '9281340938']]
  CID C_Name C_AGE C_ADDRESS C_COUNTRY C_EMAIL C_CONTACT
0 12345 Siraj 29 Punjagutta India Siraj29@gmail.com 9281340938

Enter Customer CheckIN Date [ YYYY-MM-DD ] : 2020-04-05

Enter Customer CheckOUT Date [ YYYY-MM-DD ] : 2020-04-10
C:\Users\hp\anaconda3\New\lib\site-packages\pandas\io\sql.py:1333: UserWarning: The provided table name 'BOOKING_DETAILS' is not found exactly as such in the database after writing the table,
possibly due to case sensitivity issues. Consider using lower case table names.
  warnings.warn(msg, UserWarning)
[['12345', datetime.date(2020, 9, 25), datetime.date(2020, 9, 29)), ('12346', datetime.date(2020, 7, 6), datetime.date(2020, 7, 9)), ('12347', datetime.date(2020, 3, 20), datetime.date(2020,
3, 25)), ('12347', datetime.date(2020, 1, 20), datetime.date(2020, 1, 24)), ('12348', datetime.date(2020, 5, 20), datetime.date(2020, 5, 26)), ('12345', datetime.date(2020, 4, 5),
datetime.date(2020, 4, 10)), ('12345', datetime.date(2020, 4, 5), datetime.date(2020, 4, 10))]

CHECK-IN AND CHECK-OUT ENTRY SUCCESSFULLY UPDATED !

!=====*****=====!

1--->ENTER CUSTOMER DETAILS
2--->SEARCH FOR A CUSTOMER
3--->BOOKING RECORD
4--->CALCULATE ROOM RENT
5--->CALCULATE RESTUARANT BILL

IPython console History
```

ROOM RENT

```
Variable explorer Help Plots Files
Console 2/A
10--->UPDATE CUSTOMER DETAILS

11--->EXIT

!=====END*****!

Please Enter Your Choice : 4

ENTER CUSTOMER ID : 12345
[['12345', 'Siraj', '29', 'Pujagutta', 'India', 'siraj29@gmail.com', '9281340938']]
  CID C_Name C_AGE C_ADDRESS C_COUNTRY C_EMAIL C_CONTACT
0 12345 Siraj 29 Pujagutta India siraj29@gmail.com 9281340938

#### We have The Following Rooms For You ####
1. Presidential ----> 25000 Rs.
2. Royal ----> 10000 Rs.
3. Elite ----> 5000 Rs.
4. Budget ----> 3000 Rs.

Enter Your Option : 3

Enter Customer Room No : 101

Enter No. Of Days : 5
C:\Users\hp\anaconda3\New\lib\site-packages\pandas\io\sql.py:1333: UserWarning: The provided table name 'ROOM_RENT' is not found exactly as such in the database after
writing the table, possibly due to case sensitivity issues. Consider using lower case table names.
  warnings.warn(msg, UserWarning)

Elite Room Rent : 25000
[['12347', 2, 5, 15, 50000), ('12347', 1, 4, 4, 10000), ('12345', 3, 5, 101, 25000)]

Thank You , Your Room Has Been Booked For : 5 Days

Your Total Room Rent is : Rs. 25000

!=====*****!

1--->ENTER CUSTOMER DETAILS

IPython console History
```

RESTAURANT BILL

```
Variable explorer Help Plots Files
Console 2/A

!=====*****END*****=====!

Please Enter Your Choice : 5

ENTER CUSTOMER ID : 12345
[['12345', 'Siraj', '29', 'Pujagutta', 'India', 'siraj29@gmail.com', '9281340938']]
  CID C_Name C_AGE C_ADDRESS C_COUNTRY C_EMAIL C_CONTACT
0 12345 Siraj 29 Pujagutta India siraj29@gmail.com 9281340938
"

##### We Welcome you to our restaurant-'FOOD ON FIRE' #####
      Here,We strive to serve you food for all your needs,be it
      The Proper Indian Thali
      The Masala filld Barbeque combo and many more
      Choose from our wide range of gourmet style food and appease your tastebuds
1. INDIAN VEG THALI -----> 800 Rs.
2. INDIAN NON-VEG THALI -----> 1000 Rs.
3. SIZZLER -----> 700 Rs.
4. BARBEQUE COMBO -----> 1500 Rs.

Enter Your Cusine : 3

Enter Quantity : 1
C:\Users\hp\anaconda3\New\lib\site-packages\pandas\io\sql.py:1333: UserWarning: The provided table name 'RESTAURANT_DETAILS' is not found exactly as such in the database
after writing the table, possibly due to case sensitivity issues. Consider using lower case table names.
  warnings.warn(msg, UserWarning)

SO YOU HAVE ORDERED: SIZZLER
[['12347', '3', 2, 1400), ('12347', '4', 1, 1500), ('12345', '3', 1, 700)]
Your Total Bill Amount Is : Rs. 700

**** WE HOPE YOU ENJOYED YOUR MEAL ***

!=====*****=====!

IPython console History
```

DETAILS OF ALL CUSTOMERS

```
Variable explorer Help Plots Files
Console 2/A x
6--->DISPLAY ALL CUSTOMER DETAILS
7--->GENERATE TOTAL BILL AMOUNT
8--->DELETE A CUSTOMER
9--->ANALYSE THE AMOUNT SPEND BY ALL CUSTOMERS CATEGORY WISE
10--->UPDATE CUSTOMER DETAILS
11--->EXIT

!=====*****END*****=====!

Please Enter Your Choice : 6
CID C_NAME C_AGE ... C_COUNTRY C_EMAIL C_CONTACT
0 12347 Amit 30 ... India Amit_am_real@gmail.com 8924103920
1 12347 Teja 17 ... India teja17@gmail.com 8924103920
2 12345 Siraj 29 ... India siraj29@gmail.com 9281340938

[3 rows x 7 columns]

!=====*****=====!

1--->ENTER CUSTOMER DETAILS
2--->SEARCH FOR A CUSTOMER
3--->BOOKING RECORD
4--->CALCULATE ROOM RENT
5--->CALCULATE RESTUARANT BILL
6--->DISPLAY ALL CUSTOMER DETAILS
7--->GENERATE TOTAL BILL AMOUNT

IPython console History
```

TOTAL BILL

```
Variable explorer Help Plots Files
Console 2/A
7--->GENERATE TOTAL BILL AMOUNT
8--->DELETE A CUSTOMER
9--->ANALYSE THE AMOUNT SPEND BY ALL CUSTOMERS CATEGORY WISE
10--->UPDATE CUSTOMER DETAILS
11--->EXIT

!=====*****END*****=====!

Please Enter Your Choice : 7

ENTER CUSTOMER ID : 12345
[('12345', 'Siraj', '29', 'Pujagutta', 'India', 'siraj29@gmail.com', '9281340938')]
  CID C_Name C_AGE C_ADDRESS C_COUNTRY C_EMAIL C_CONTACT
0 12345 Siraj 29 Pujagutta India siraj29@gmail.com 9281340938
  C_Name ROOM_RENT RES_BILL
0 Siraj 25000 700

**** THE GRAND TRIDENT HOTEL **** CUSTOMER BILLING ****

CUSTOMER NAME : Siraj
ROOM RENT : Rs. 25000
RESTAURANT BILL : Rs. 700

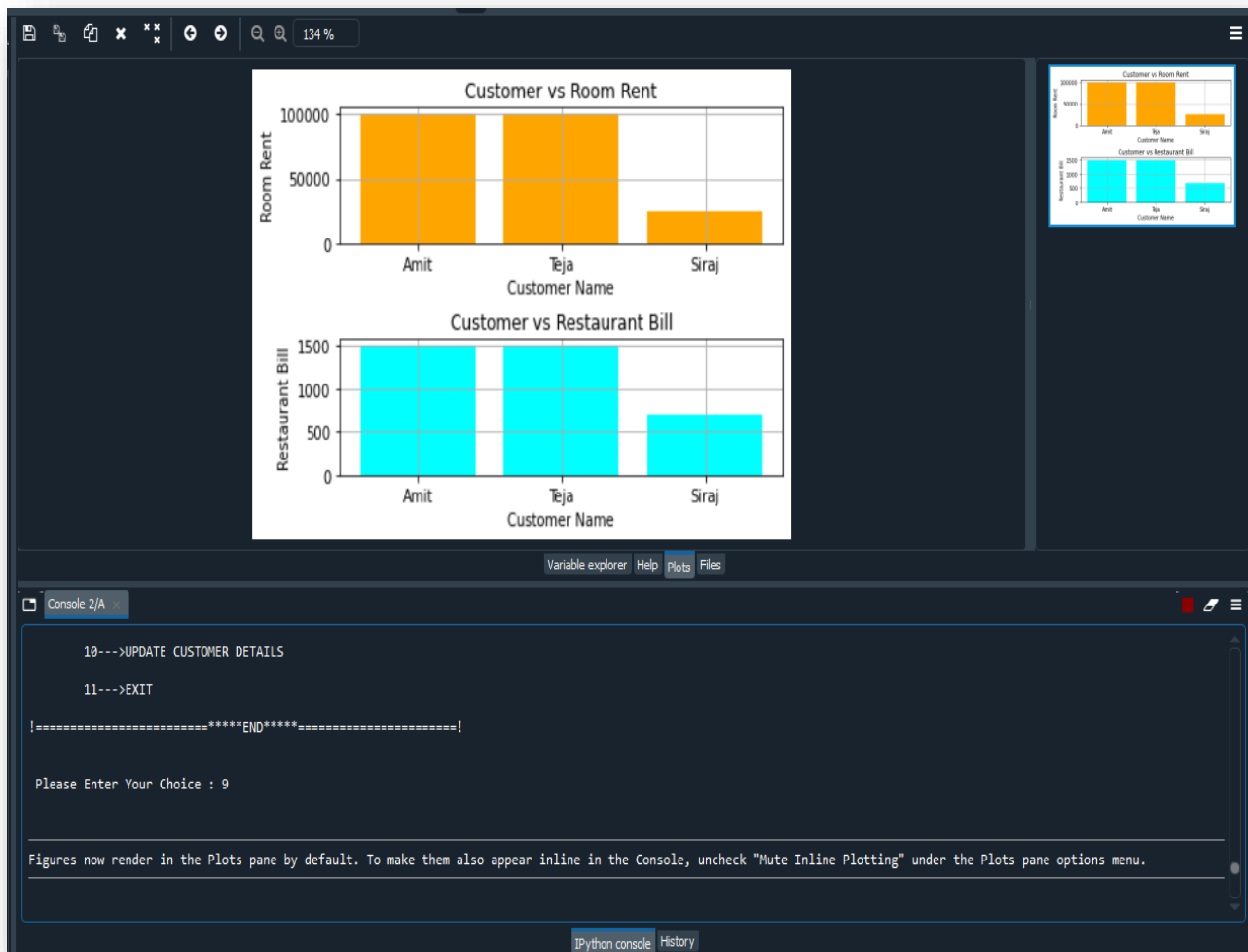
TOTAL AMOUNT : Rs. 25700

!=====*****=====!

1--->ENTER CUSTOMER DETAILS
2--->SEARCH FOR A CUSTOMER

Python console History
```


ANALYSIS OF AMOUNT SPENT BY THE CUSTOMERS CATEGORY-WISE



UPDATING CUSTOMER DETAILS

```
Variable explorer  Help  Plots  Files

Console 2/A

8--->DELETE A CUSTOMER

9--->ANALYSE THE AMOUNT SPEND BY ALL CUSTOMERS CATEGORY WISE

10--->UPDATE CUSTOMER DETAILS

11--->EXIT

!=====*****END*****=====!

Please Enter Your Choice : 10

ENTER CUSTOMER ID : 12345
[('12345', 'Siraj', '29', 'Pujagutta', 'India', 'siraj29@gmail.com', '9281340938')]
  CID C_Name C_AGE C_ADDRESS C_COUNTRY C_EMAIL C_CONTACT
0 12345 Siraj 29 Pujagutta India siraj29@gmail.com 9281340938
1. UPDATE CUSTOMER NAME
2. UPDATE CUSTOMER AGE
3. UPDATE CUSTOMER ADDRESS
4. UPDATE CUSTOMER COUNTRY
5. UPDATE CUSTOMER EMAIL
6. UPDATE CUSTOMER CONTACT

Enter Your choice for updation : 3

PLEASE ENTER THE CORRECT ADDRESS : Punjagutta,Hyderabad

***** CUSTOMER ADDRESS UPDATED SUCCESSFULLY! *****

!=====*****=====!

1--->ENTER CUSTOMER DETAILS

2--->SEARCH FOR A CUSTOMER

3--->BOOKING RECORD

Python console  History
```

DELETING A CUSTOMER

```
Variable explorer Help Plots Files
Console 2/A x
5--->CALCULATE RESTUARANT BILL
6--->DISPLAY ALL CUSTOMER DETAILS
7--->GENERATE TOTAL BILL AMOUNT
8--->DELETE A CUSTOMER
9--->ANALYSE THE AMOUNT SPEND BY ALL CUSTOMERS CATEGORY WISE
10--->UPDATE CUSTOMER DETAILS
11--->EXIT

!=====*****END*****=====!

Please Enter Your Choice : 8

ENTER CUSTOMER ID : 12345
[('12345', 'Siraj', '29', 'Punjagutta,Hyderabad', 'India', 'siraj29@gmail.com', '9281340938')]
  CID C_Name C_AGE ... C_COUNTRY          C_EMAIL  C_CONTACT
0  12345  Siraj   29 ...      India  siraj29@gmail.com  9281340938

[1 rows x 7 columns]

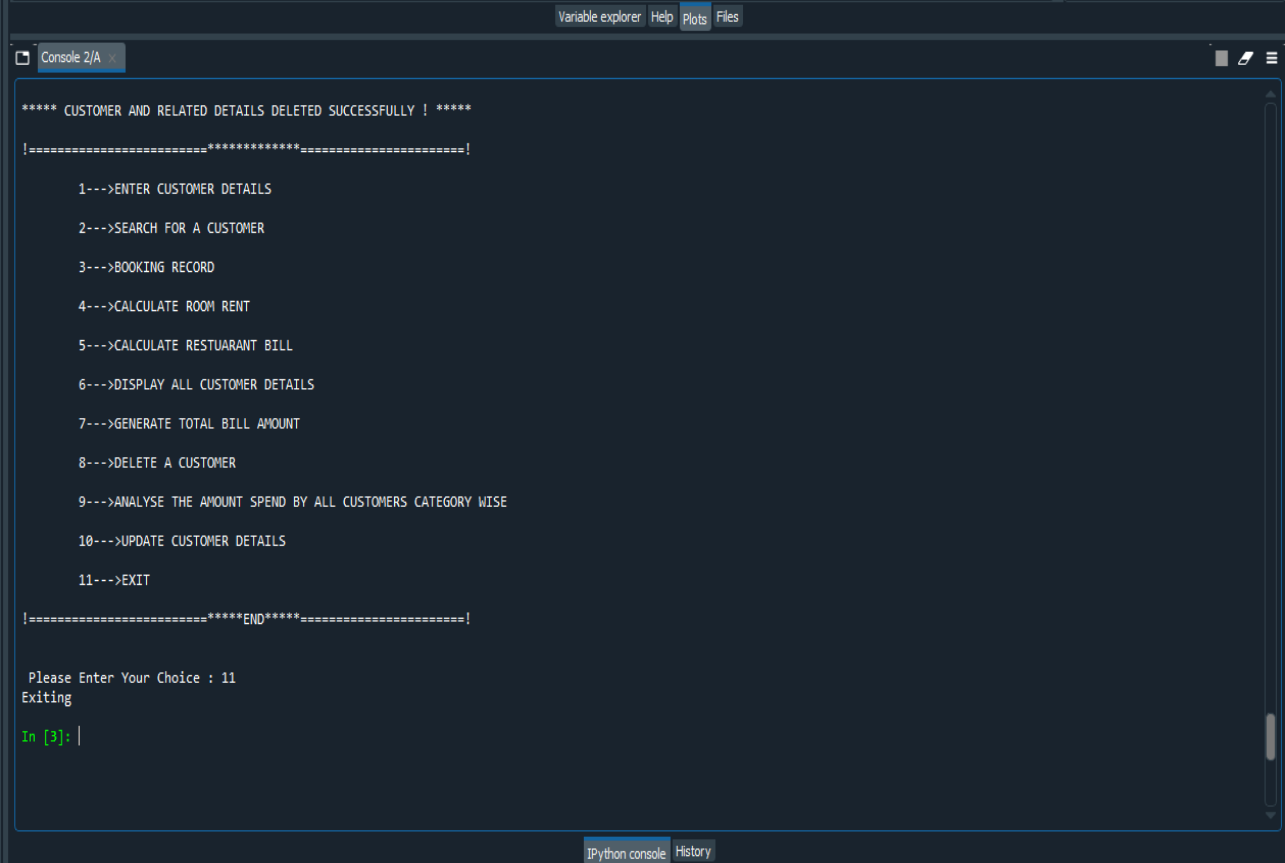
***** CUSTOMER AND RELATED DETAILS DELETED SUCCESSFULLY ! *****

!=====*****=====!

1--->ENTER CUSTOMER DETAILS
2--->SEARCH FOR A CUSTOMER
3--->BOOKING RECORD
4--->CALCULATE ROOM RENT

JPython console History
```

EXITING



```
Variable explorer  Help  Plots  Files

Console 2/A x

***** CUSTOMER AND RELATED DETAILS DELETED SUCCESSFULLY ! *****

!=====*****!

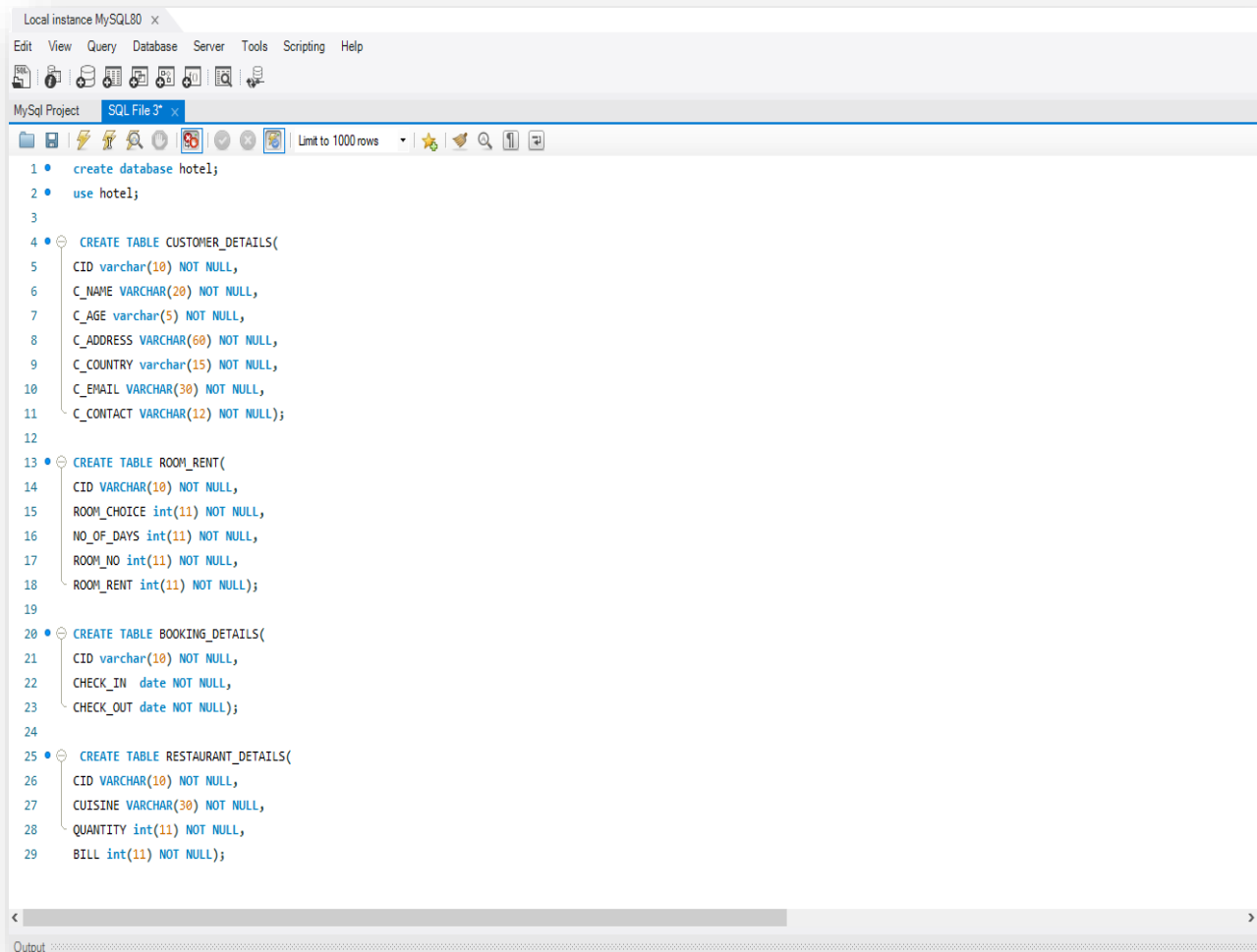
1--->ENTER CUSTOMER DETAILS
2--->SEARCH FOR A CUSTOMER
3--->BOOKING RECORD
4--->CALCULATE ROOM RENT
5--->CALCULATE RESTUARANT BILL
6--->DISPLAY ALL CUSTOMER DETAILS
7--->GENERATE TOTAL BILL AMOUNT
8--->DELETE A CUSTOMER
9--->ANALYSE THE AMOUNT SPEND BY ALL CUSTOMERS CATEGORY WISE
10--->UPDATE CUSTOMER DETAILS
11--->EXIT

!=====*****END*****!

Please Enter Your Choice : 11
Exiting
In [3]: |

Python console  History
```

WORKBENCH CODE



The screenshot displays the MySQL Workbench interface. The title bar reads 'Local instance MySQL80 x'. The menu bar includes 'Edit', 'View', 'Query', 'Database', 'Server', 'Tools', 'Scripting', and 'Help'. The toolbar contains icons for file operations, query execution, and database management. The 'MySQL Project' pane on the left shows a tree view with 'SQL File 3*' selected. The main editor area contains the following SQL code:

```
1 • create database hotel;
2 • use hotel;
3
4 • CREATE TABLE CUSTOMER_DETAILS(
5   CID varchar(10) NOT NULL,
6   C_NAME VARCHAR(20) NOT NULL,
7   C_AGE varchar(5) NOT NULL,
8   C_ADDRESS VARCHAR(60) NOT NULL,
9   C_COUNTRY varchar(15) NOT NULL,
10  C_EMAIL VARCHAR(30) NOT NULL,
11  C_CONTACT VARCHAR(12) NOT NULL);
12
13 • CREATE TABLE ROOM_RENT(
14   CID VARCHAR(10) NOT NULL,
15   ROOM_CHOICE int(11) NOT NULL,
16   NO_OF_DAYS int(11) NOT NULL,
17   ROOM_NO int(11) NOT NULL,
18   ROOM_RENT int(11) NOT NULL);
19
20 • CREATE TABLE BOOKING_DETAILS(
21   CID varchar(10) NOT NULL,
22   CHECK_IN date NOT NULL,
23   CHECK_OUT date NOT NULL);
24
25 • CREATE TABLE RESTAURANT_DETAILS(
26   CID VARCHAR(10) NOT NULL,
27   CUISINE VARCHAR(30) NOT NULL,
28   QUANTITY int(11) NOT NULL,
29   BILL int(11) NOT NULL);
```

At the bottom of the window, there is an 'Output' pane.

MYSQL DATABASE AND TABLES USED IN THIS PROJECT

DATABASE

```
MySQL 8.0 Command Line Client
mysql: [Warning] C:\Program Files\MySQL\MySQL Server 8.0\bin\mysql.exe: ignoring option '--no-beep' due to invalid value ''.
Enter password: *****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 34
Server version: 8.0.21 MySQL Community Server - GPL

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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> USE hotel;
Database changed
mysql> SHOW TABLES;
+-----+
| Tables_in_hotel |
+-----+
| booking_details |
| customer_details |
| restaurant_details |
| room_rent |
+-----+
4 rows in set (0.00 sec)

mysql>
```

TABLE STRUCTURE 1 AND 2

```
+-----+
4 rows in set (0.00 sec)

mysql> DESCRIBE booking_details;
+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+
| CID        | varchar(10)   | NO   |     | NULL    |       |
| CHECK_IN   | date          | NO   |     | NULL    |       |
| CHECK_OUT  | date          | NO   |     | NULL    |       |
+-----+
3 rows in set (0.00 sec)

mysql> DESCRIBE customer_details;
+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+
| CID        | varchar(10)   | NO   |     | NULL    |       |
| C_NAME     | varchar(20)   | NO   |     | NULL    |       |
| C_AGE      | varchar(5)    | NO   |     | NULL    |       |
| C_ADDRESS  | varchar(60)   | NO   |     | NULL    |       |
| C_COUNTRY  | varchar(15)   | NO   |     | NULL    |       |
| C_EMAIL    | varchar(30)   | NO   |     | NULL    |       |
| C_CONTACT  | varchar(12)   | NO   |     | NULL    |       |
+-----+
7 rows in set (0.00 sec)

mysql> _
```

TABLE STRUCTURE 3 AND 4

```
mysql> DESCRIBE restaurant_details;
+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+
| CID        | varchar(10)   | NO   |     | NULL    |       |
| CUISINE    | varchar(30)   | NO   |     | NULL    |       |
| QUANTITY   | int           | NO   |     | NULL    |       |
| BILL       | int           | NO   |     | NULL    |       |
+-----+
4 rows in set (0.00 sec)

mysql> DESCRIBE room_rent;
+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+
| CID        | varchar(10)   | NO   |     | NULL    |       |
| ROOM_CHOICE | int           | NO   |     | NULL    |       |
| NO_OF_DAYS | int           | NO   |     | NULL    |       |
| ROOM_NO    | int           | NO   |     | NULL    |       |
| ROOM_RENT  | int           | NO   |     | NULL    |       |
+-----+
5 rows in set (0.00 sec)

mysql> _
```

BACKEND DATA GENERATED THROUGH SOFTWARE

```
+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> SELECT * FROM booking_details;
+-----+-----+-----+
| CID | CHECK_IN | CHECK_OUT |
+-----+-----+-----+
| 12345 | 2020-09-25 | 2020-09-29 |
| 12346 | 2020-07-06 | 2020-07-09 |
| 12347 | 2020-03-20 | 2020-03-25 |
| 12347 | 2020-01-20 | 2020-01-24 |
| 12348 | 2020-05-20 | 2020-05-26 |
| 12345 | 2020-04-05 | 2020-04-10 |
| 12345 | 2020-04-05 | 2020-04-10 |
| 12346 | 2020-05-03 | 2020-05-05 |
| 12347 | 2020-05-20 | 2020-05-24 |
| 12348 | 2020-06-06 | 2020-06-12 |
+-----+-----+-----+
10 rows in set (0.00 sec)

mysql> 
```

BACKEND DATA GENERATED THROUGH SOFTWARE

```
+-----+
10 rows in set (0.00 sec)

mysql> SELECT * FROM customer_details;

+-----+-----+-----+-----+-----+-----+-----+
| CID | C_NAME | C_AGE | C_ADDRESS | C_COUNTRY | C_EMAIL | C_CONTACT |
+-----+-----+-----+-----+-----+-----+-----+
| 12345 | Siraj | 29 | Punjagutta | India | Siraj29@gmail.com | 9281340938 |
| 12346 | Arjun | 34 | Pragati Nagar,Hyderabad | India | arjun34@gmail.com | 9201372932 |
| 12347 | Chitra | 24 | Jubilee Hills,Hyderabad | India | spchitra@gmail.com | 9562819376 |
| 12348 | Sarah | 28 | Gachibowli,Hyderabad | India | sarahjazz@gmail.com | 9568201773 |
+-----+-----+-----+-----+-----+-----+-----+

4 rows in set (0.00 sec)

mysql> █
```


BACKEND DATA GENERATED THROUGH SOFTWARE

```
mysql> SELECT * FROM restaurant_details;
+-----+-----+-----+-----+
| CID   | CUISINE | QUANTITY | BILL |
+-----+-----+-----+-----+
| 12346 | 4       | 1        | 1500 |
| 12347 | 1       | 1        | 800  |
| 12348 | 4       | 2        | 3000 |
| 12345 | 3       | 1        | 700  |
+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql>
```

BACKEND DATA GENERATED THROUGH SOFTWARE

```
+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> SELECT * FROM room_rent;
+-----+-----+-----+-----+-----+
| CID   | ROOM_CHOICE | NO_OF_DAYS | ROOM_NO | ROOM_RENT |
+-----+-----+-----+-----+-----+
| 12346 | 4           | 2          | 102     | 6000      |
| 12347 | 2           | 4          | 103     | 40000     |
| 12348 | 1           | 6          | 104     | 150000    |
| 12345 | 3           | 5          | 101     | 25000     |
+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql>
```