|  |  |  |
| --- | --- | --- |
| **TABLE OF CONTENTS** | | |
| **SERIAL NO** | **DESCRIPTION** | **PAGE NO** |
| 01 | ACKNOWLEDGEMENT |  |
| 02 | INTRODUCTION |  |
| 03 | OBJECTIVES OF THE PROJECT |  |
| 04 | SOURCE CODE |  |
| 05 | OUTPUT |  |
| 06 | HARDWARE AND SOFTWARE REQUIREMENTS |  |
| 07 | BIBLIOGRAPHY |  |

**ACKNOWLEDGEMENT**

**I would like to express a deep sense of thanks and gratitude to my project guide Mr. Raman Kumar for guiding me immensely through the course of the project. He always evinced keen interest in my work. His constructive advice and constant motivation have been responsible for the successful completion of this project.**

**I express my deep sense of gratitude to the luminary The Principal, Colonel Arun Datta who has been continuously motivating and extending their helping hand to us.**

**I also thanks to my parents for their motivation and support. I must thanks to my classmates for their timely help and support for compilation of this project.**

**Last but not the least, I would like to thank all those who had helped directly or indirectly towards the completion of this project.**

**INTRODUCTION**

**HOTEL MANAGEMENT SYSTEM** is a simple project designed in Python Programming Language with MySQL. This project uses the all MySQL commands DDL (CREATE DATABASE, TABLE) and DML (INSERT, UPDATE, DELETE, and SELECT) through Python. The Python and MySQL Connectivity are done by using mysql.connector package. The all basic operations like Insert, Update, View and Delete are done in this project.

**PROJECT TITLE- “HOTEL MANAGEMENT SYSTEM”**

DBMS: MySQL

Host: localhost

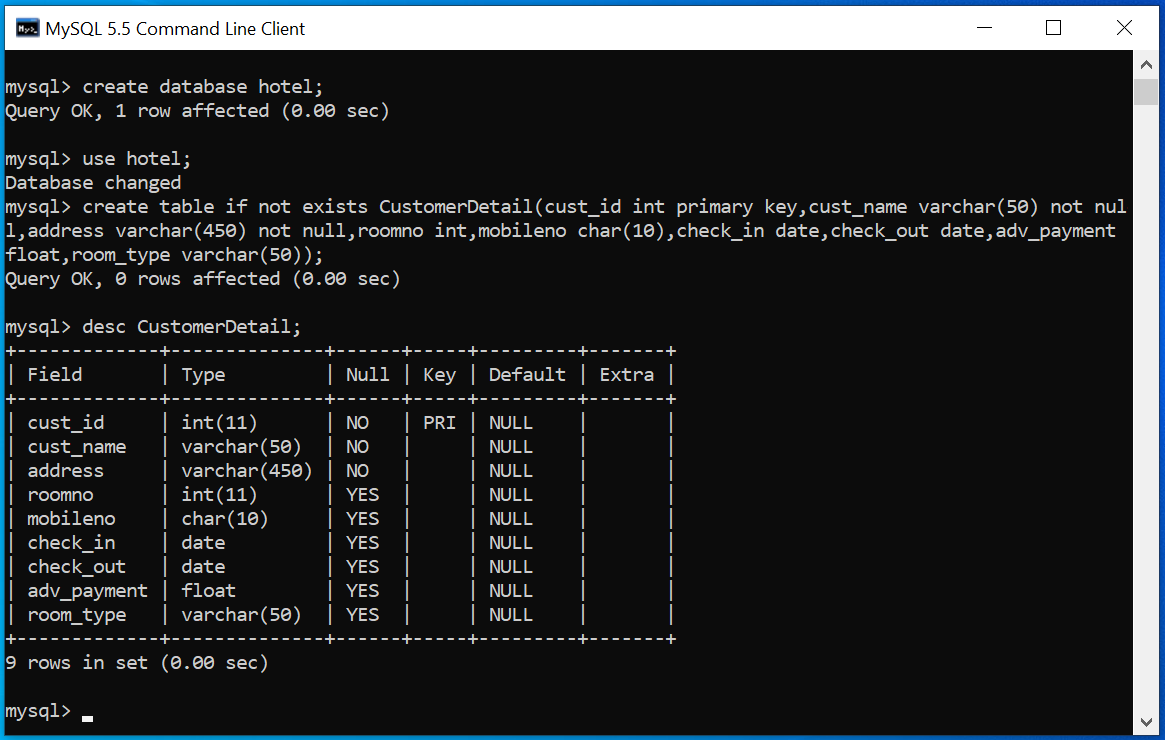
User: root

Password: root

DataBase: hotel

Table Structure: As per the screenshot given below:

**Table: CustomerDetail**



**OBJECTIVES OF THE PROJECT**

The objective of this project is to let the students apply the programming knowledge into a real- world situation/problem and exposed the students how programming skills helps in developing a good software.

1. Write programs utilizing modern software tools.
2. Apply object oriented programming principles effectively when developing small to medium sized projects.
3. Write effective procedural code to solve small to medium sized problems.
4. Students will demonstrate a breadth of knowledge in computer science, as exemplified in the areas of systems, theory and software development.
5. Students will demonstrate ability to conduct a research or applied Computer Science project, requiring writing and presentation skills which exemplify scholarly style in computer science.

**FLOW OF EXECUTION**

**SOURCE CODE**

**#Python Module:Hotel Reservation System**

import Module1

import Module2

import Module3

import Module4

import Module5

import Module6

import Module7

while True:

print("\t\t\*\*\*\*\*\*Hotel Reservation System\*\*\*\*\*\*\n")

print("==========================================")

print("1. To Add New Record")

print("2. To Search a Record")

print("3. To Update the Records")

print("4. To Delete the Record")

print("5. To View All the Record")

print("6. To Generate the Report")

print("7. Database Setup")

print("8. Exit")

print("==========================================")

choice=int(input("Enter choice between 1 to 8 -------> :"))

if choice==1:

Module1.AddRecord()

elif choice==2:

Module2.SearchRecord()

elif choice==3:

Module3.UpdateRecord()

elif choice==4:

Module4.DeleteRecord()

elif choice==5:

Module5.DisplayRecord()

elif choice==6:

Module6.GenerateReport()

elif choice==7:

Module7.DataBase()

elif choice==8:

break

else:

print("Wrong choice.......Enter your choice again")

x=input("Enter any key to continue")

**#Python Module: Module1**

from datetime import date,datetime,timedelta

import mysql.connector

def AddRecord():

try:

mydb=mysql.connector.connect(host="localhost",user="root",password="root",database="Hotel")

mycursor=mydb.cursor()

print("Enter Customer's information......")

cust\_id=int(input("Enter the Customer ID: "))

cust\_name=input("Enter the Customer Name: ")

address=input("Enter the Address: ")

roomno=int(input("Enter the Room Number: "))

mobileno=input("Enter the Mobile Number: ")

check\_in=input("Enter the Check-In Date (YYYY-MM-DD): ")

check\_out=input("Enter the Check-Out Date (YYYY-MM-DD): ")

adv\_payment=float(input("Enter the Advance Amount: "))

room\_type=int(input("Room Type:- \n 1. Suite (Rs. 2000 /day) \n 2. Deluxe (Rs. 1000 /day) \n 3. Standard (Rs. 500 /day)\n"))

if room\_type==1:

room\_type="Suite"

elif room\_type==2:

room\_type="Deluxe"

elif room\_type==3:

room\_type="Standard"

else:

print("Enter the correct choice")

#noofdays=" "

sql="insert into CustomerDetail values(%s,%s,%s,%s,%s,%s,%s,%s,%s)"

val=(cust\_id,cust\_name,address,roomno,mobileno,check\_in,check\_out,adv\_payment,room\_type)

mycursor.execute(sql,val)

mydb.commit()

mycursor.close()

mydb.close()

print("Records Inserted Successfully..........")

except Exception as ex:

print("Something went wrong",ex)

mydb.close()

**#Python Module: Module2**

from datetime import date,datetime,timedelta

import mysql.connector

def SearchRecord():

try:

mydb=mysql.connector.connect(host="localhost",user="root",password="root",database="Hotel")

mycursor=mydb.cursor()

cust\_id=int(input("Enter Customer ID to be Searched: "))

sql="select \* from CustomerDetail where cust\_id=%s"

val=(cust\_id,)

mycursor.execute(sql,val)

for(cust\_id,cust\_name,address,roomno,mobileno,check\_in,check\_out,adv\_payment,room\_type) in mycursor:

print("==============================================")

print("==============================================")

print("Customer ID: ",cust\_id)

print("Customer Name: ",cust\_name)

print("Customer Address: ",address)

print("Room Number: ",roomno)

print("Mobile Number: ",mobileno)

print("Check-In Date: ",check\_in)

print("Check-Out Date: ",check\_out)

print("Advance Payment:",adv\_payment)

print("Room Type:",room\_type)

print("===============================================")

mydb.commit()

mycursor.close()

mydb.close()

print("Record Searched Successfully..........")

except Exception as ex:

print("Something went wrong",ex)

mydb.close()

**#Python Module: Module3**

from datetime import date,datetime,timedelta

import mysql.connector

def UpdateRecord():

try:

mydb=mysql.connector.connect(host="localhost",user="root",password="root",database="Hotel")

mycursor=mydb.cursor()

cust\_id=int(input("Enter Customer ID to be Updated: "))

sql="select \* from CustomerDetail where cust\_id=%s"

val=(cust\_id,)

print("Enter New Record")

#cust\_id=int(input("Enter the Customer ID: "))

cust\_name=input("Enter the Customer Name: ")

address=input("Enter the Address: ")

roomno=int(input("Enter the Room Number: "))

mobileno=input("Enter the Mobile Number: ")

check\_in=input("Enter the Check-In Date (YYYY-MM-DD): ")

check\_out=input("Enter the Check-Out Date (YYYY-MM-DD): ")

adv\_payment=float(input("Enter the Advance Amount: "))

room\_type=int(input("Room Type:- \n 1. Suite (Rs. 2000 /day) \n 2. Delux (Rs. 1000 /day) \n 3. Standard (Rs. 500 /day): "))

if room\_type==1:

room\_type="Suite"

elif room\_type==2:

room\_type="Deluxe"

elif room\_type==3:

room\_type="Standard"

else:

print("Enter the correct choice")

sql2="update CustomerDetail set cust\_name=%s, address=%s, roomno=%s, mobileno=%s,check\_in=%s,check\_out=%s,adv\_payment=%s,room\_type=%s where cust\_id=%s"

val2=(cust\_name,address,roomno,mobileno,check\_in,check\_out,adv\_payment,room\_type,cust\_id)

mycursor.execute(sql2,val2)

mydb.commit()

mycursor.close()

mydb.close()

print("Records Updated Successfully..........")

except Exception as ex:

print("Something went wrong",ex)

mydb.close()

**#Python Module: Module4**

from datetime import date,datetime,timedelta

import mysql.connector

def DeleteRecord():

try:

mydb=mysql.connector.connect(host="localhost",user="root",password="root",database="Hotel")

mycursor=mydb.cursor()

cust\_id=int(input("Enter Customer ID to be Deleted: "))

sql="delete from CustomerDetail where cust\_id=%s"

val=(cust\_id,)

mycursor.execute(sql,val)

mydb.commit()

mycursor.close()

mydb.close()

print("Records Deleted Successfully..........")

except Exception as ex:

print("Something went wrong",ex)

mydb.close()

**#Python Module: Module5**

from datetime import date,datetime,timedelta

import mysql.connector

def DisplayRecord():

try:

mydb=mysql.connector.connect(host="localhost",user="root",password="root",database="Hotel")

mycursor=mydb.cursor()

sql="select \* from CustomerDetail"

mycursor.execute(sql)

for(cust\_id,cust\_name,address,roomno,mobileno,check\_in,check\_out,adv\_payment,room\_type) in mycursor:

print("==============================================")

print("Customer ID: ",cust\_id)

print("Customer Name: ",cust\_name)

print("Customer Address: ",address)

print("Room Number: ",roomno)

print("Mobile Number: ",mobileno)

print("Check-In Date: ",check\_in)

print("Check-Out Date: ",check\_out)

print("Advance Payment:",adv\_payment)

print("Room Type:",room\_type)

print("===============================================")

mydb.commit()

mycursor.close()

mydb.close()

except Exception as ex:

print("Something went wrong",ex)

mydb.close()

**#Python Module: Module6**

from datetime import date

import datetime

import mysql.connector

def GenerateReport():

try:

mydb=mysql.connector.connect(host="localhost",user="root",password="root",database="Hotel")

mycursor=mydb.cursor()

Tax=0.0

cust\_id=int(input("Enter the Customer ID: "))

sql="select \* from CustomerDetail where cust\_id=%s"

now=datetime.datetime.now()

print("\n\*\*\*\*\*\*\*\*\*\*\*\*THE TAJ HOTEL\*\*\*\*\*\*\*\*\*\*\*\*\n")

print("Current Date and Time: ",end=" ")

print(now.strftime("%y-%m-%d %H:%M:%S"))

val=(cust\_id,)

mycursor.execute(sql,val)

for(cust\_id,cust\_name,address,roomno,mobileno,check\_in,check\_out,adv\_payment,room\_type) in mycursor:

print("==============================================")

print("==============================================")

print("Customer ID: ",cust\_id)

print("Customer Name: ",cust\_name)

print("Customer Address: ",address)

print("Room Number: ",roomno)

print("Mobile Number: ",mobileno)

print("Check-In Date: ",check\_in)

print("Check-Out Date: ",check\_out)

print("Advance Payment:",adv\_payment)

print("Room Type:",room\_type)

print("===============================================")

print("check-in= ",check\_in)

print("check-out= ",check\_out)

ndays=check\_out-check\_in

nofdays=ndays.days

print("No of days= ",nofdays)

print("===============================================")

print("Hotel The Taj")

print("500, North Extension")

print("New Delhi")

print("===============================================")

print("Customer ID: ",cust\_id)

print("Customer Name: ",cust\_name)

print("Customer Address: ",address)

print("===============================================")

print("Room Number: ",roomno)

print("Mobile Number: ",mobileno)

print("===============================================")

print("Check-In: ",check\_in)

print("Check-Out: ",check\_out)

print("Room Type: ",room\_type)

print("===============================================")

print("Number of Days: ",ndays)

if room\_type=="Suite":

price=2000

elif room\_type=="Deluxe":

price=1000

else:

price=500

Total=nofdays\*price

print("Total: ",Total)

print("Advance: ",adv\_payment)

Tax=Total\*0.10

print("Tax: ",Tax)

netamt=(float(Total)+float(Tax))-float(adv\_payment)

print("Net Amount: ",netamt)

mydb.commit()

mycursor.close()

mydb.close()

except Exception as ex:

print("Something went wrong",ex)

mydb.close()

**#Python Module: Module7**

import MyDatabase

def DataBase():

while True:

print("\t\t\*\*\*\*\*Database Management\*\*\*\*\*\n")

print("=====================================")

print("1. Database Creation")

print("2. Creation of Relations")

print("3. List of Relations")

print("4. Return to Main Menu")

print("======================================")

choice=int(input("Enter choice between 1 to 4-------->: "))

if choice==1:

MyDatabase.CreateDatabase()

elif choice==2:

MyDatabase.CreateRelations()

elif choice==3:

MyDatabase.ShowRelations()

elif choice==4:

return

else:

print("Wrong choice.......Enter your choice again")

x=input("Enter any key to continue")

**#Python Module: MyDatabase**

from datetime import date,datetime,timedelta

import mysql.connector

def CreateDatabase():

try:

mydb=mysql.connector.connect(host="localhost",user="root",password="root")

mycursor=mydb.cursor()

print("Creating Hotel Database")

sql="create database if not exists Hotel"

mycursor.execute(sql)

print("Hotel Database Created Successfully....")

except Exception as ex:

print(ex)

def CreateRelations():

try:

mydb=mysql.connector.connect(host="localhost",user="root",password="root",database="Hotel")

mycursor=mydb.cursor()

print("Creating CustomerDetail Relation")

sql="create table if not exists CustomerDetail(cust\_id int primary key, cust\_name varchar(50) not null,address varchar(450) not null,roomno int,mobileno char(10),check\_in date,check\_out date,adv\_payment float, room\_type varchar(50))"

mycursor.execute(sql)

print("CustomerDetail Relation Created Successfully....")

except Exception as ex:

print("Something went wrong",ex)

def ShowRelations():

try:

mydb=mysql.connector.connect(host="localhost",user="root",password="root",database="Hotel")

mycursor=mydb.cursor()

print("Displaying List of Relations")

sql="show tables"

mycursor.execute(sql)

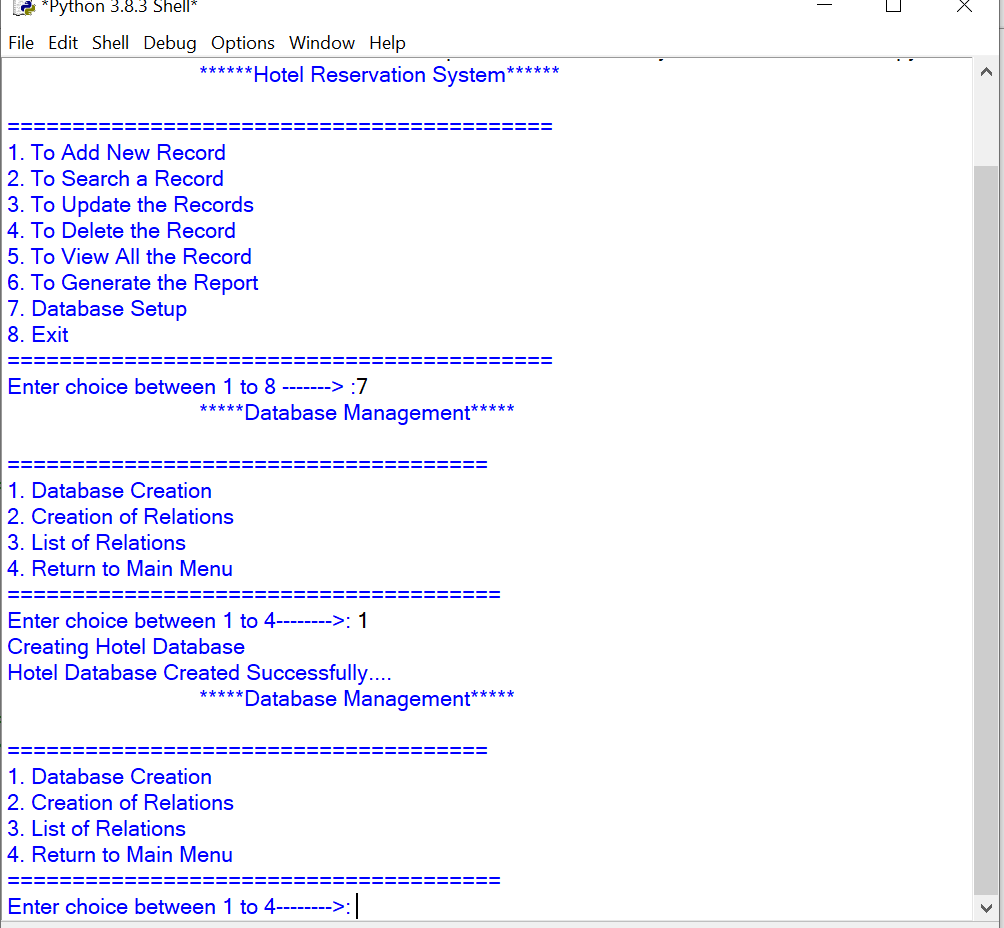
for i in mycursor:

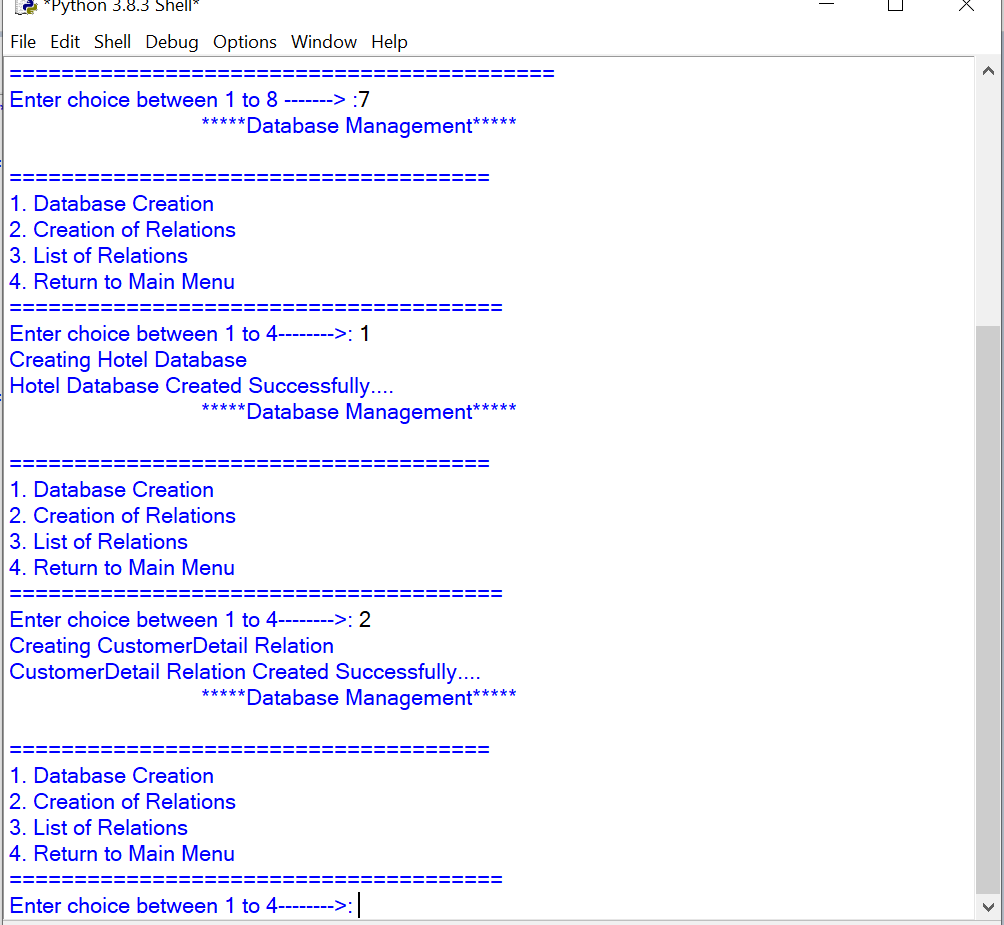
print(i)

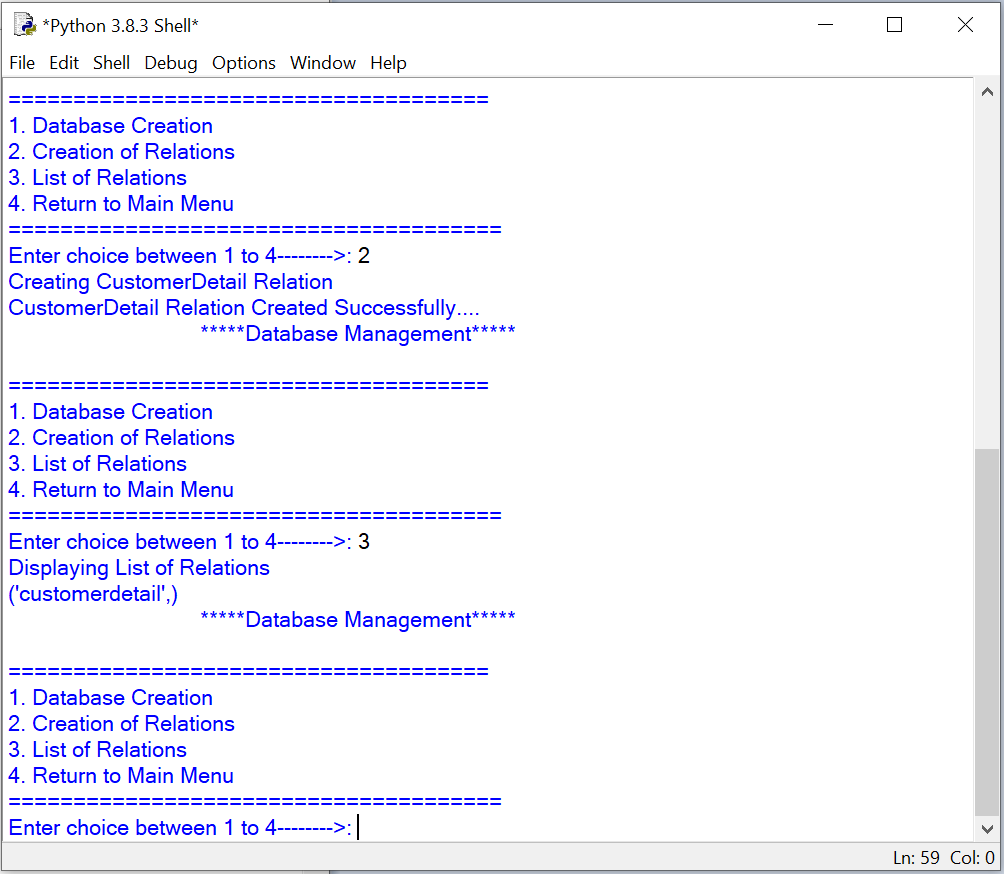
except Exception as ex:

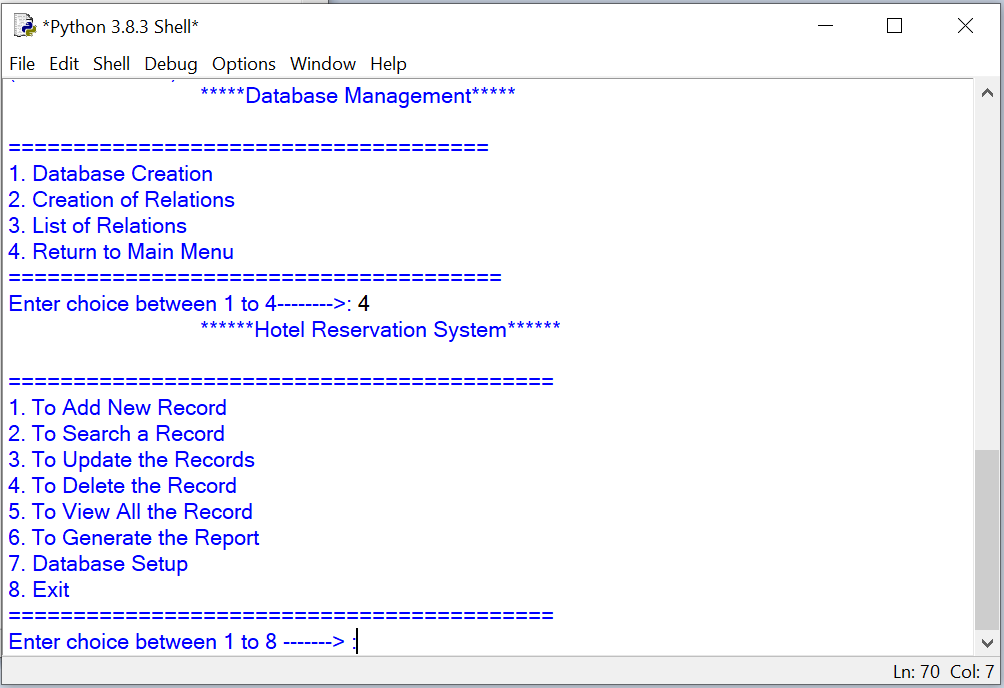
print("Something went wrong",ex)

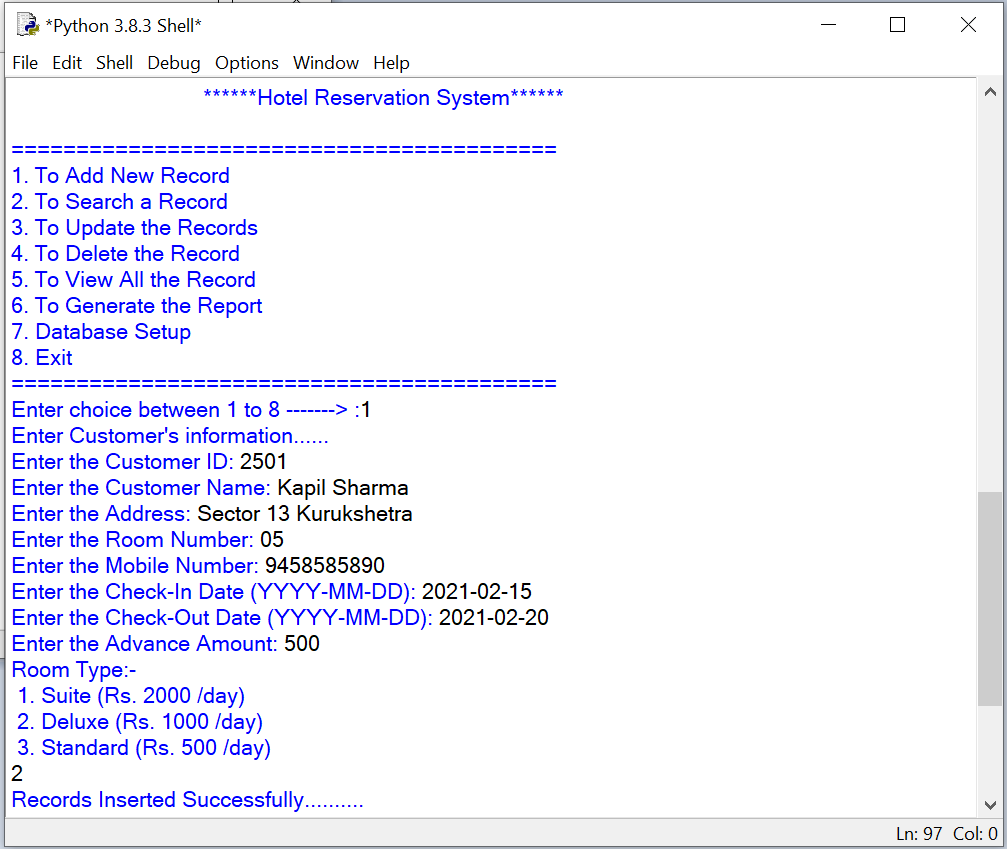
**OUTPUT**

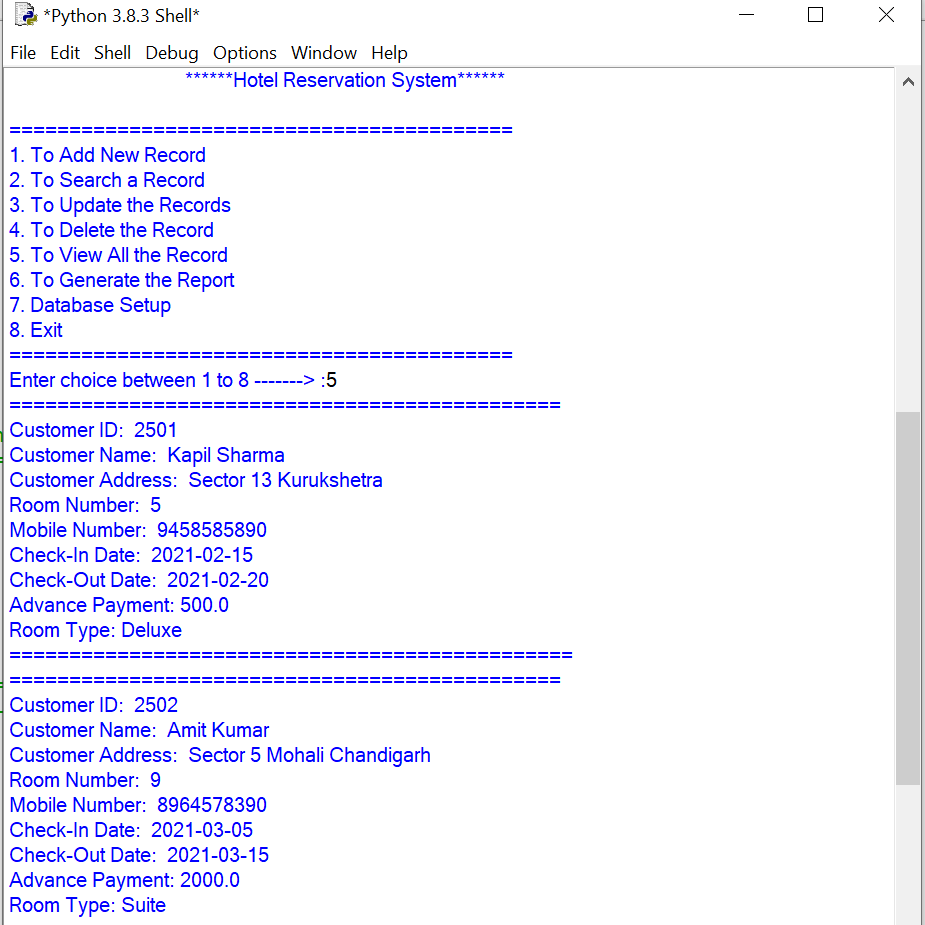


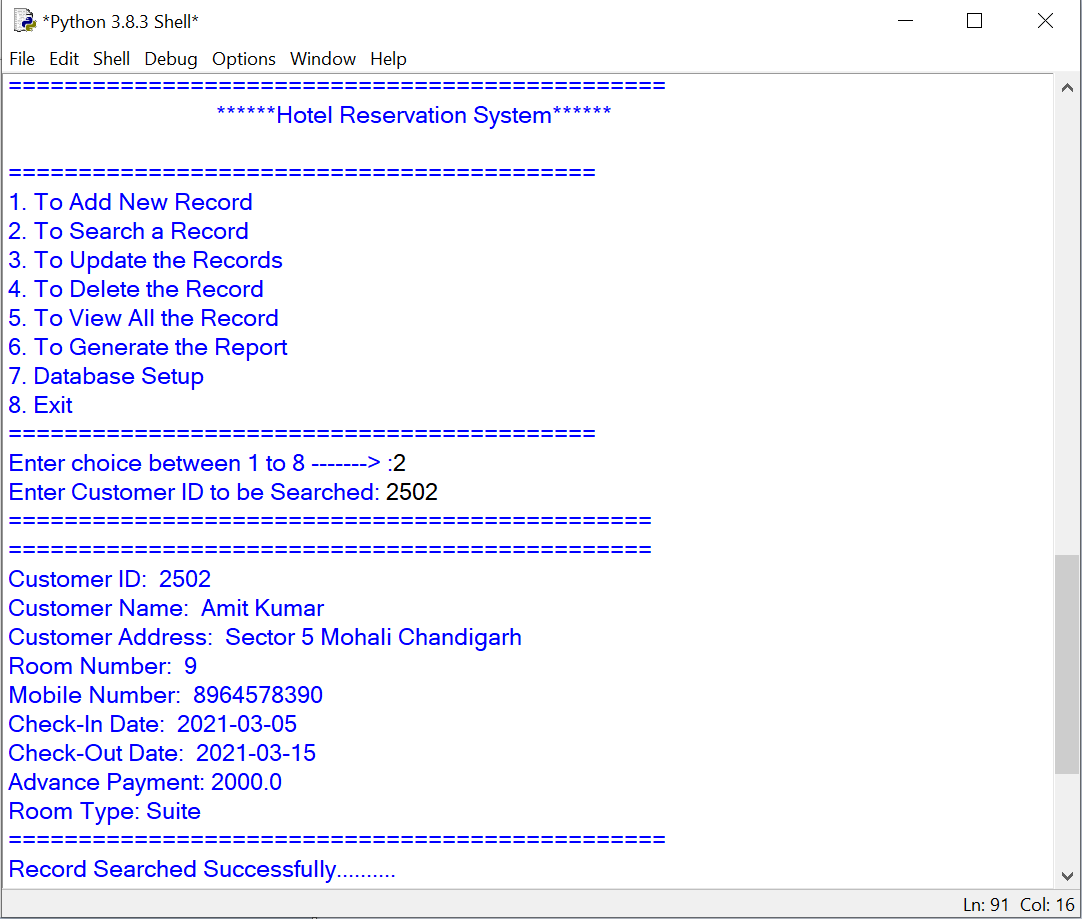


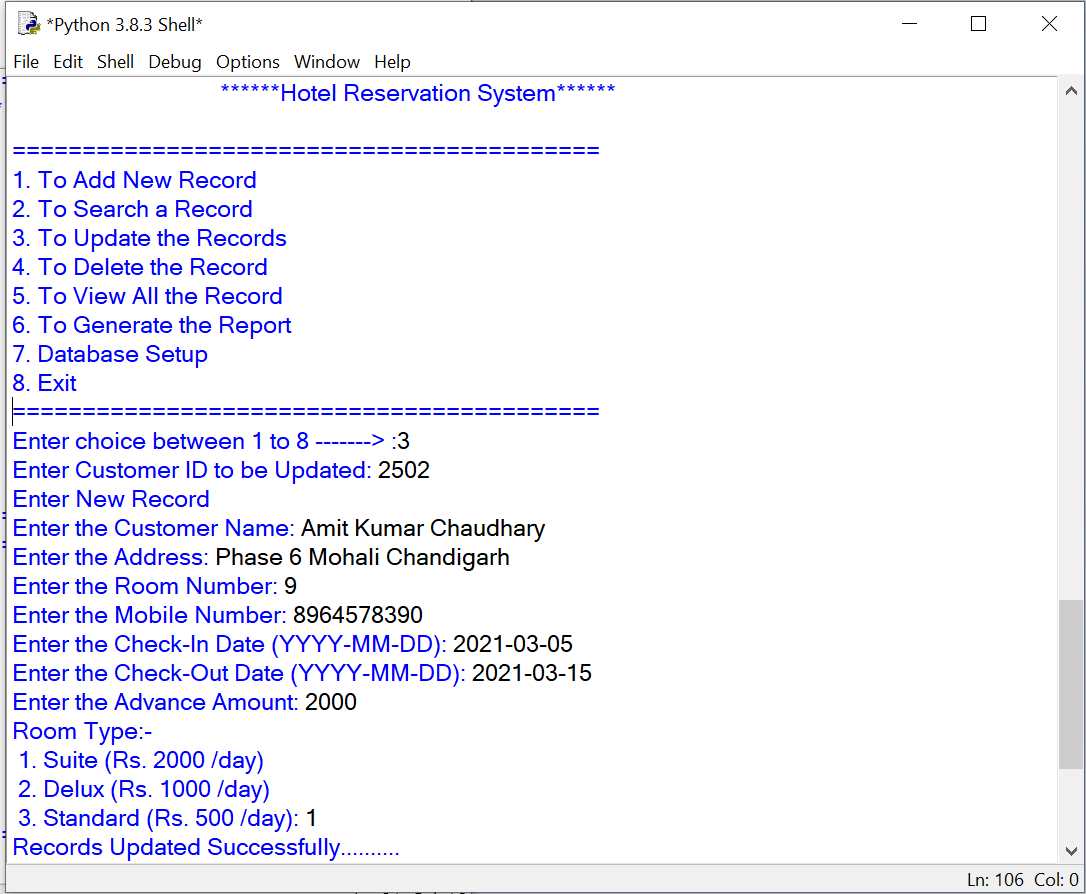


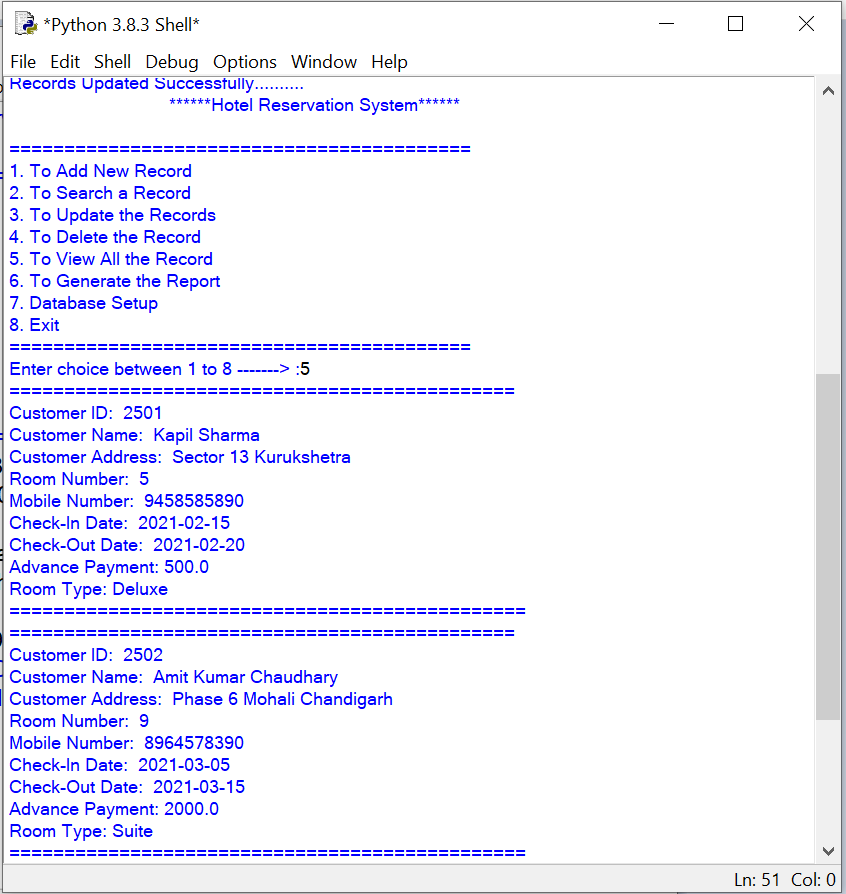


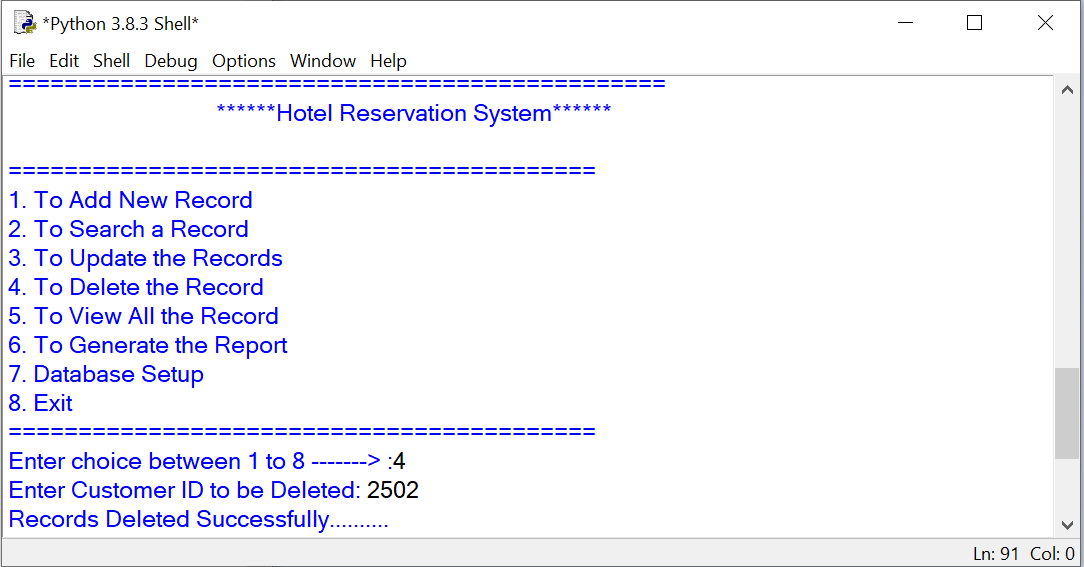
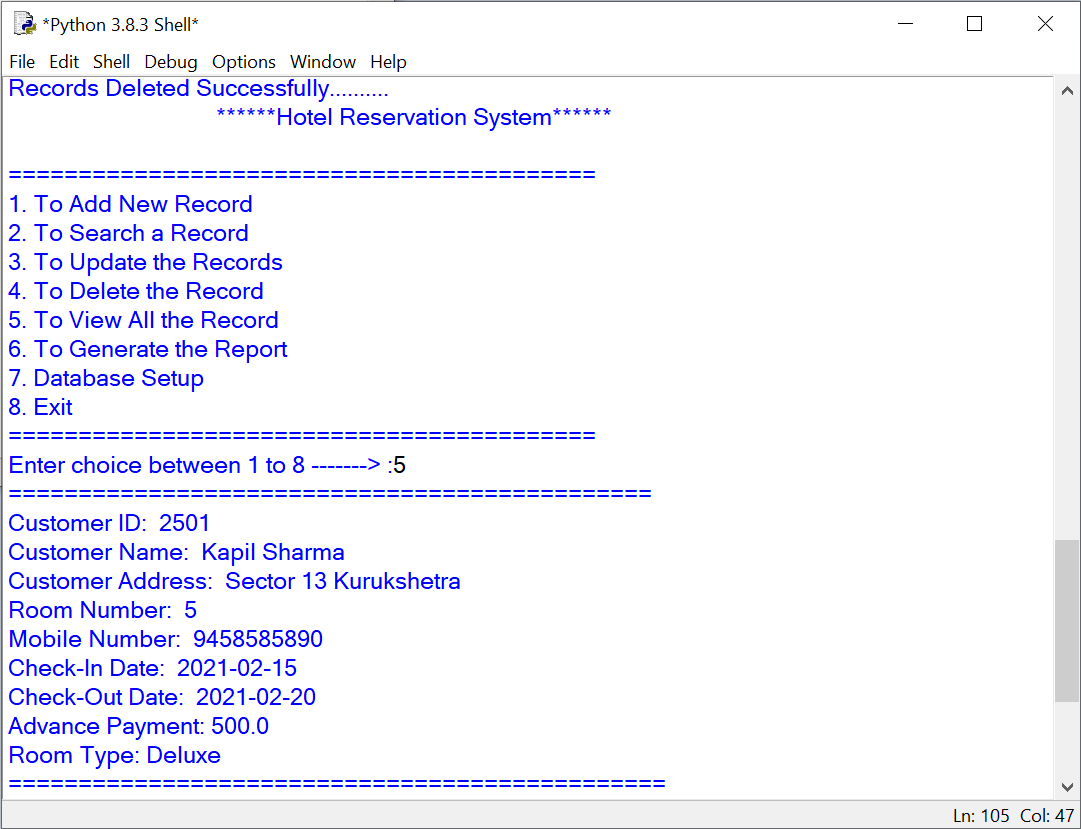
****

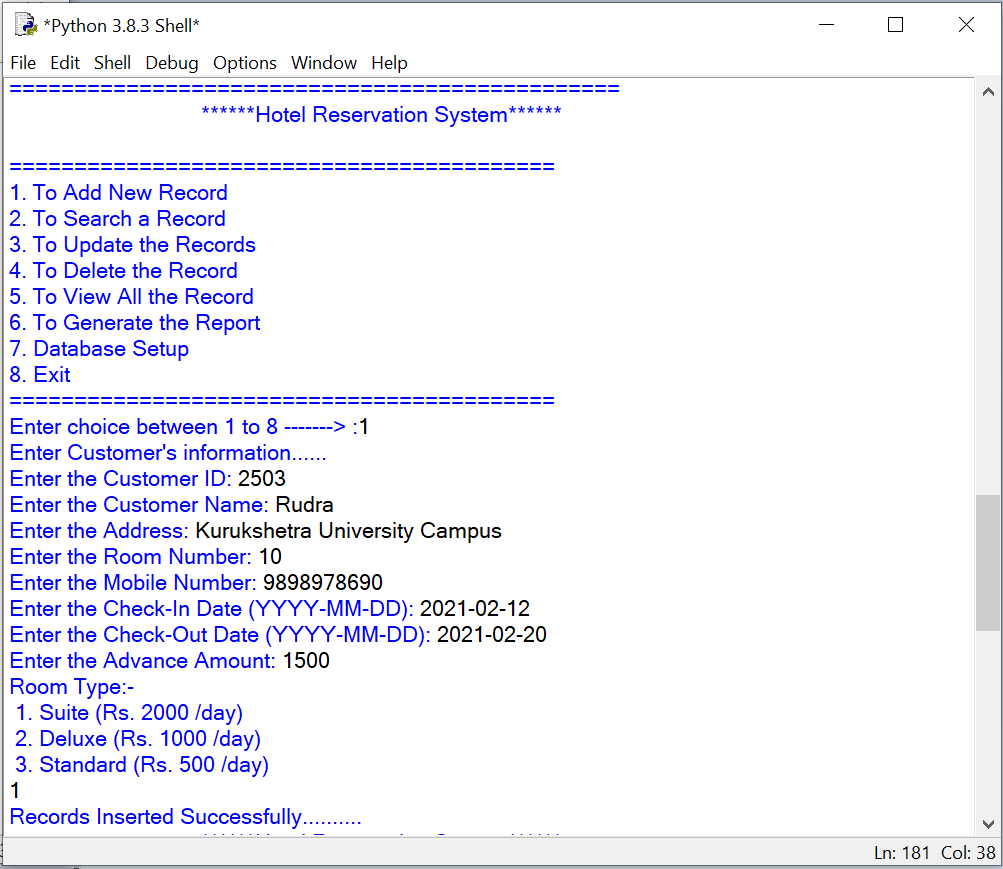
****

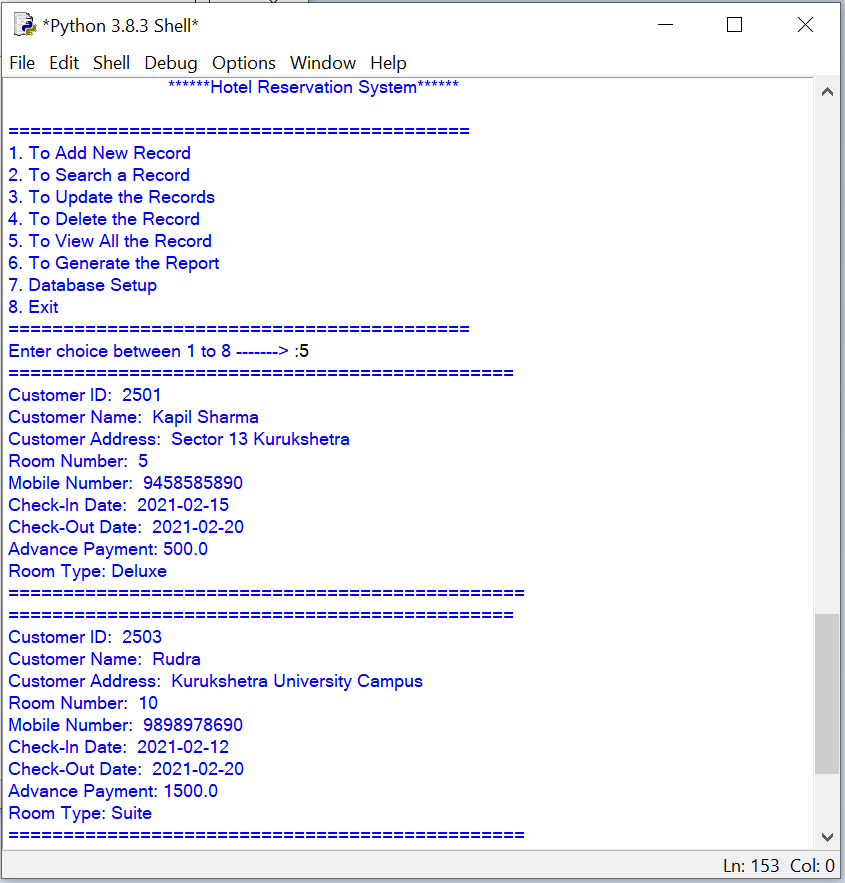
****

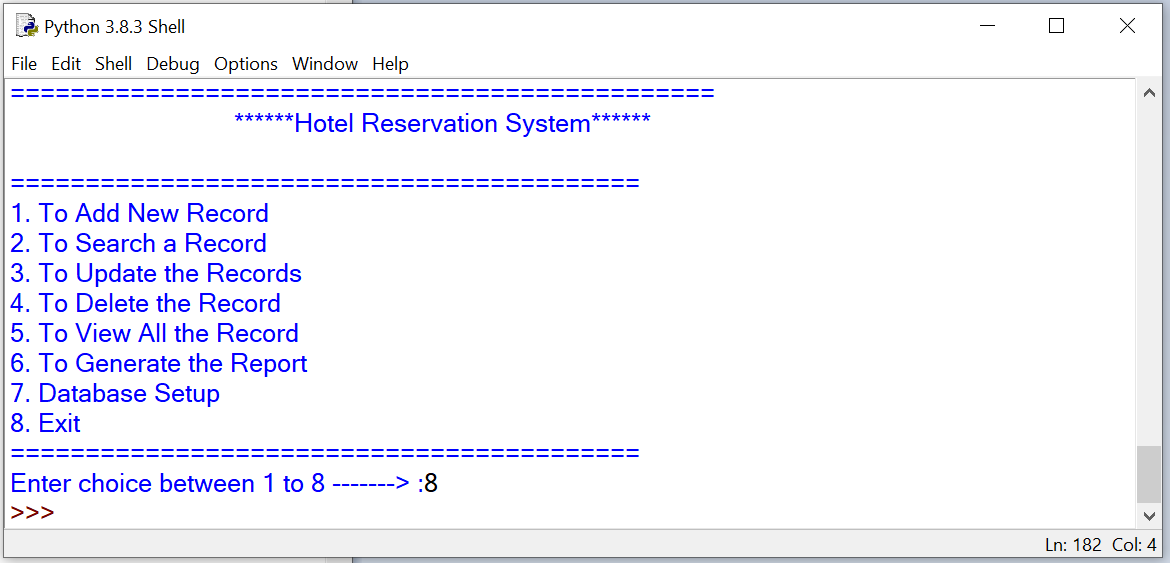
****

****

****

****

****

****

**HARDWARE AND SOFTWARE REQUIREMENTS**

I. OPERATING SYSTEM : MICROSOFT WINDOWS 10

II. PROCESSOR : DUALCORE (ANY)

III. RAM : 4 GB

IV. HARD DISK / SSD : 500 GB / 120

V. PEN DRIVE : (If Backup Required)

VI. MONITOR 14.1 or 15 -17 inch

VI. KEY BOARD AND MOUSE

VIII. PRINTER : (If Print Required – [Hard copy])

**SOFTWARE REQUIREMENTS:**

1. WINDOWS 10 OPERATING SYSTEM
2. SETUP OF PYTHON
3. MYSQL DATABASE

**BIBLIOGRAPHY**

1. ***Computer science With Python - By: Sumita Arora***
2. ***Computer science With Python - By: Preeti Arora***
3. ***Website:*** [**https://www.w3schools.com**](https://www.w3schools.com)