DBMS LAB – SEM 5

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WORKING WITH PYTHON AND MySQL

Design a simple database for Online Railway Reservation System using Python to access the back end MySQL database. The online reservation system must contain the following modules.

- **main.py :**

Contains calls to the 4 diff modules in the order as shown below

```
import deleteModule
import findModule
import updateModule
import insertModule

insertModule.insertFn()
findModule.findFn()
updateModule.updateFn()
deleteModule.deleteFn()
```

Q1. The insert module must be able to accept the seatno (primary key), name of the passenger, source station and destination station and store it in the database

- **Insert Module:-**

```
def insertFn():
    #Q1: insert module:-

    print("Q1. INSERT OPERATION")
    print("")

    #show table data before:-
    print("Table Before Insertion:-")
    cursor1.execute("select * from railres")
    for i in cursor1:
        print(i)
    print("")
```

```
    print("Enter Seat Number:- ")
    seatNo = input()
    print("Enter Name:- ")
    name = input()
    print("Enter Source Address:- ")
    src = input()
    print("Enter Destination Address:- ")
    dest = input()

    insert_sql = "INSERT INTO railres (seatno, name, source, destination)
VALUES (%s,%s,%s, %s)"
    insert_variables = (seatNo,name,src, dest)

    cursor1.execute(insert_sql, insert_variables)
    print(cursor1.rowcount, "record inserted.")
    mydb.commit()

    #show table data:-
    print("")
    print("Table After Insertion:-")
    cursor1.execute("select * from railres")
    print("")
    for i in cursor1:
        print(i)
    print("")
```

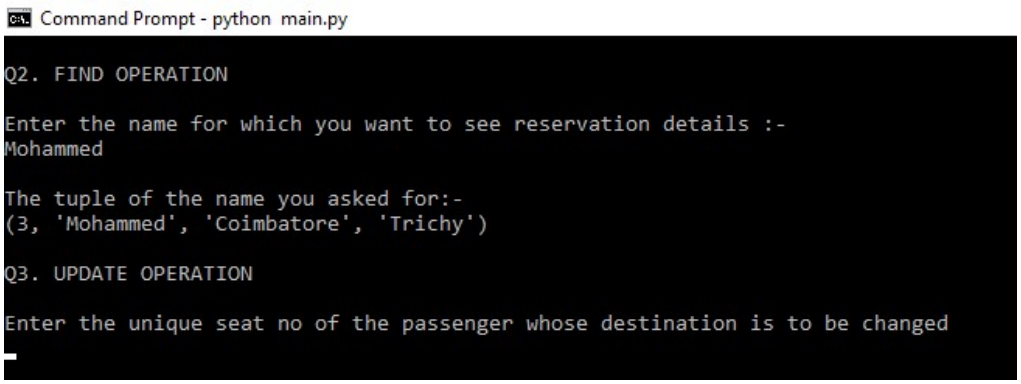
- **OUTPUT:-**

Q2) The find module must be able to accept the name of the passenger and display all the details of the corresponding passenger.

- **Find Module:-**

```
def findFn():
#Q2: Find module
    print("Q2. FIND OPERATION")
    print("")

    print("Enter the name for which you want to see reservation details :-
")
    findName=input()

    sql = "select * from railres where name =%s"
    input_name = (findName, )
    cursor1.execute(sql, input_name)

    print("")
    print("The tuple of the name you asked for:-")
    for i in cursor1:
        print(i)
    print("")
```

- **OUTPUT:-**

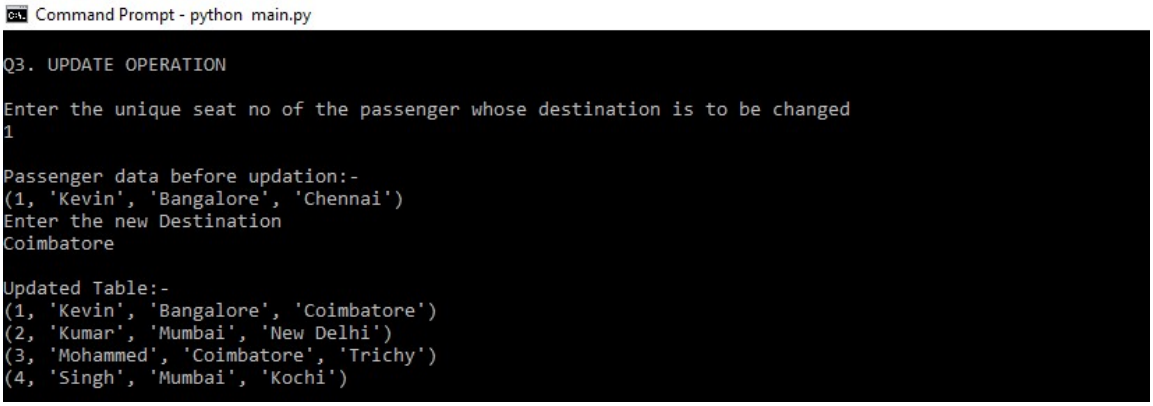


Q3) The Update module must be able to update the destination of the passenger.

- **Update Module:-**

```
def updateFn():
    #Q3: Update
    print("Q3. UPDATE OPERATION")
    print("")

    print("Enter the unique seat no of the passenger whose destination is to be ch
anged")
    user_seatNo = input()

    #show table tuple before:-

    sql = "select * from railres where seatno =%s"
    val = (user_seatNo, )
    cursor1.execute(sql, val)

    print("")
    print("Passenger data before updation:-")
    for i in cursor1:
        print(i)


    print("Enter the new Destination")
    newDest = input()

    update_sql = "UPDATE railres SET destination = %s WHERE seatno = %s"
    update_val = (newDest, user_seatNo)
    cursor1.execute(update_sql, update_val)

    mydb.commit()

    #show table data:-

    cursor1.execute("select * from railres")
    print("")
    print("Updated Table:-")
    for i in cursor1:
        print(i)
    print("")
```

- **OUTPUT:-**



Q4) The delete module must be able to delete/ cancel the seat based on the seatno.

- **Delete Module:-**

```
def deleteFn():
    #Q4 : Delete:-
    print("Q4. DELETE OPERATION")
    print("")

    print("Enter the unique seatno registration that you would like to del
ete")
    user_seatNo = input()

    #show table data before:-

    print("")
    print("Table Data Before:-")
    cursor1.execute("select * from railres")
    print("")
    for i in cursor1:
        print(i)


    delete_sql = "delete from railres where seatno = %s"
    delete_val = (user_seatNo,)
    cursor1.execute(delete_sql, delete_val)

    mydb.commit()

    #show table data after:-
```

```
print("")
print("Table Data After:-")
cursor1.execute("select * from railres")
print("")
for i in cursor1:
    print(i)
print("")
```

- **OUTPUT:-**

THANK YOU, MA'AM!
