// Alexandra Flores

// Joey Cindass

// Lab 4

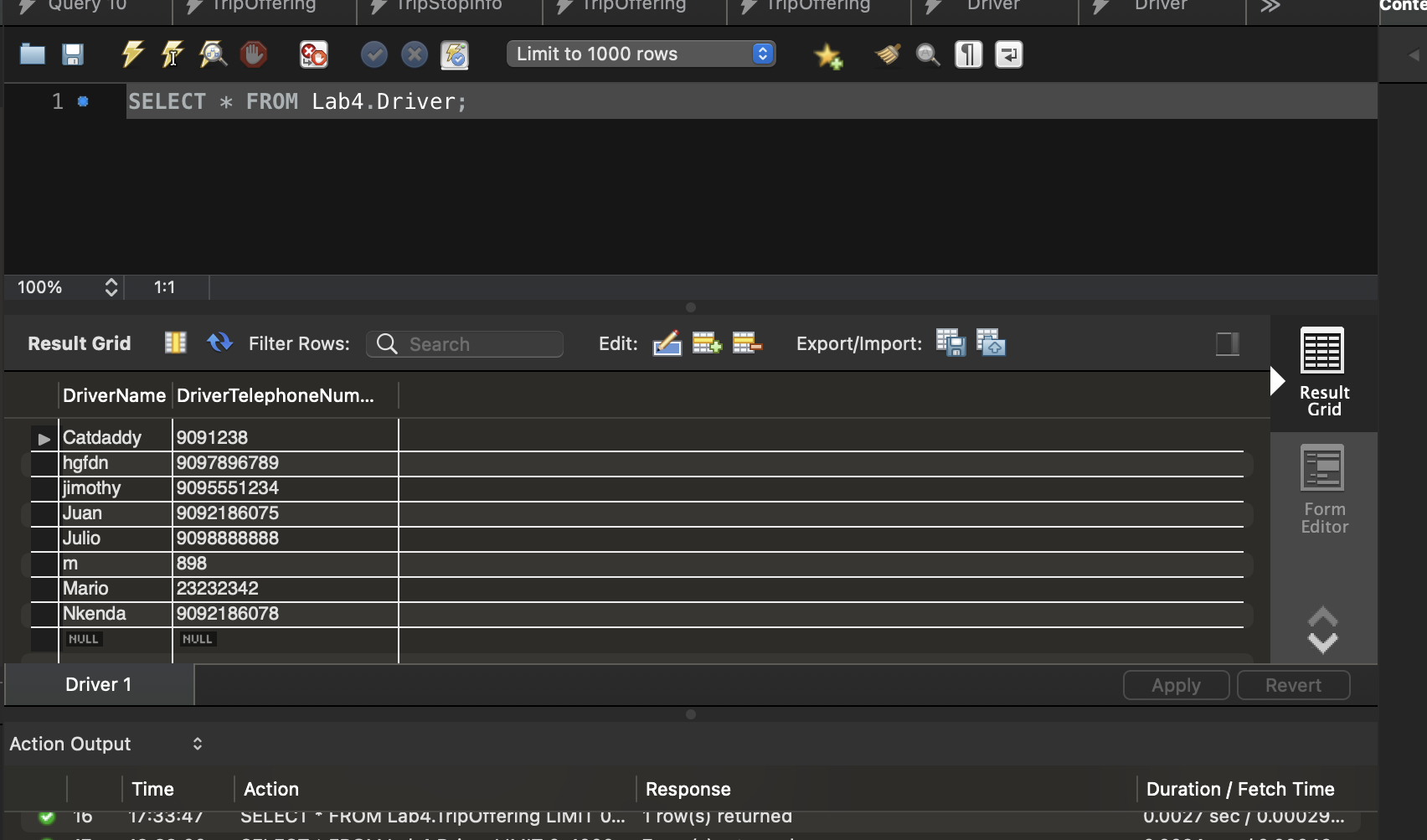
// CS 4350

// Professor Salloum

// MW 2:30 – 3:45

// Graduation ddate – summer 2023

import java.sql.\*;  
import java.util.Scanner;  
  
  
public class Lab4 {  
 public static void main(String[] args) throws Exception {  
  
 Connection con = DriverManager.*getConnection*("jdbc:mysql://localhost:3306/Lab4", "root", "Rexcooper1");  
 Statement st = con.createStatement();  
  
 System.*out*.println("Number 1-----------------------------------------------");  
 ResultSet rs = st.executeQuery("SELECT T1.ScheduledStartTime, T1.ScheduledArrivalTime, T1.DriverName, T1.BusID\n" +  
 "FROM TripOffering T1, Trip T\n" +  
 "WHERE T.StartLocationName = 'LA' AND T.DestinationName= 'Croatia'");  
  
  
 rs.next();  
  
 //String TripNumber = rs.getString("TripNumber");  
 String ScheduledStartTime = rs.getString("ScheduledStartTime");  
 String BusID = rs.getString("BusID");  
 String ScheduledArrivalTime = rs.getString("ScheduledArrivalTime");  
 String DriverName = rs.getString("DriverName");  
  
 System.*out*.println("Scheduled Start Time " + ScheduledStartTime + " ");  
 System.*out*.println("Scheduled Arrival Time " + ScheduledArrivalTime + " " + "DriverName " + DriverName + " ");  
 System.*out*.println("BusID " + BusID + " ");  
  
  
 //#2  
  
  
 String sqlInsert;  
 String sqlDelete;  
 String strSelect;  
  
  
 System.*out*.println("Number 2 -----------------------------------------------");  
 System.*out*.println("Enter tripnum: ");  
 Scanner keyboard = new Scanner(System.*in*);  
 int tripnum = keyboard.nextInt();  
  
 System.*out*.println("Enter date: ");  
 String userdate = keyboard.nextLine();  
  
 System.*out*.println("Enter start time: ");  
 String usertime = keyboard.nextLine();  
  
 //2.1  
 sqlDelete = "'DELETE FROM TripOffering WHERE TripNumber = '" + tripnum + "' AND Date = '" + userdate  
 + "' AND ScheduledStartTime = ‘" + usertime + "'";  
 System.*out*.println("Number 2.1-----------------------------------------------");  
 System.*out*.println("SQL command: " + sqlDelete + "\n");  
  
 //check  
  
 //2.2  
  
 String useratime;  
 String input;  
  
 System.*out*.println("Number 2.2-----------------------------------------------");  
 String y;  
 do {  
  
 System.*out*.println("Enter tripnum: ");  
 tripnum = keyboard.nextInt();  
  
 System.*out*.println("Enter date: ");  
 userdate = keyboard.nextLine();  
  
 System.*out*.println("Enter start time: ");  
 usertime = keyboard.nextLine();  
  
 System.*out*.println("Enter arrival time: ");  
 useratime = keyboard.nextLine();  
  
 System.*out*.println("Enter driver name: ");  
 DriverName = keyboard.nextLine();  
  
 System.*out*.println("Enter bus ID: ");  
 BusID = keyboard.nextLine();  
 keyboard.nextLine();  
  
 sqlInsert = "INSERT INTO TripOffering (TripNumber, Date , ScheduledStartTime, ScheduledArrivalTime, " +  
 "DriverName, BusID) VALUES"  
 + "(" + tripnum  
 + ", "  
 + userdate  
 + " , "  
 + usertime  
 + ", "  
 + useratime  
 + ", "  
 + DriverName  
 + " , "  
 + BusID  
 + ")";  
  
 System.*out*.println("The SQL statement is: " + sqlInsert + "\n");  
  
 System.*out*.println("Add record? Enter y or n: ");  
 input = keyboard.nextLine();  
  
 } while (input == "yes");  
  
  
 strSelect = "select \* from tripoffering";  
 System.*out*.println("The SQL statement is: " + strSelect + "\n");  
 ResultSet res = st.executeQuery(strSelect);  
 while (res.next()) {  
 System.*out*.println(res.getInt("TripNumber") + ", "  
 + res.getString("Date") + ", "  
 + res.getString("ScheduledStartTime") + ", "  
 + res.getString("ScheduledArrivalTime") + ", "  
 + res.getString("DriverName")  
 + res.getInt("BusID"));  
 }  
  
  
  
 //2.3  
  
 String newdriver;  
  
 System.*out*.println("Number 2.3-----------------------------------------------");  
 System.*out*.println("Enter tripnum: ");  
 tripnum = keyboard.nextInt();  
  
 System.*out*.println("Enter date: ");  
 userdate = keyboard.nextLine();  
  
 System.*out*.println("Enter start time: ");  
 usertime = keyboard.nextLine();  
  
 System.*out*.println("Enter new driver name: ");  
 newdriver = keyboard.nextLine();  
  
  
 String starttime;  
 String strUpdate = "UPDATE TripOffering SET DriverName = " + newdriver + " WHERE TripNumber = " + tripnum +  
 " AND Date = '" + userdate + "' AND ScheduledStartTime = '" + usertime +"'";  
 System.*out*.println("The SQL statement is: " + strUpdate + "\n");  
  
  
 strSelect = "select \* from tripoffering where tripnumber = " + tripnum;  
 System.*out*.println("The SQL statement is: " + strSelect + "\n");  
  
 //check update  
 ResultSet change = st.executeQuery(strSelect);  
 while(change.next()) {  
 System.*out*.println(change.getInt("tripnumber") + ", "  
 + change.getString("date") + ", "  
 + change.getString("scheduledstarttime") + ", "  
 + change.getDouble("drivername") + ", "  
 + change.getInt("busid"));  
 }  
  
  
 //#3Display the stops of a given trip ( i.e. the attributes of the table TripStopInfo).  
  
 System.*out*.println("Number 3-----------------------------------------------");  
 Statement st1 = con.createStatement();  
 ResultSet rs1 = st1.executeQuery("SELECT \*\n" +  
 "FROM TripStopInfo\n" +  
 "WHERE TripNumber = 446");  
  
  
 rs1.next();  
 int TripNumber = rs1.getInt("TripNumber");  
 int StopNumber = rs1.getInt("StopNumber");  
 int SequenceNumber = rs1.getInt("SequenceNumber");  
 String DrvingTime = rs1.getString("DrvingTime");  
  
 System.*out*.println("3 Display the stops of a given trip");  
  
 System.*out*.println("The Trip Number is " + TripNumber);  
 System.*out*.println("The Stop Number is " + StopNumber + " ");  
 System.*out*.println("THe sequence number is " + SequenceNumber);  
 System.*out*.println("The driving time is " + DrvingTime + " ");  
  
 // #4 display weekly schedule  
  
  
 System.*out*.println("Number 4-----------------------------------------------");  
 Statement st2 = con.createStatement();  
 ResultSet rs2 = st2.executeQuery("SELECT \* \n" +  
 "FROM TripOffering\n" +  
 "WHERE DriverName = \"Miguel\" AND Date = '2023-04-27'");  
  
  
 rs2.next();  
 TripNumber = rs2.getInt("TripNumber");  
 String Date = rs2.getString("Date");  
 ScheduledStartTime = rs2.getString("ScheduledStartTime");  
 ScheduledArrivalTime = rs2.getString("ScheduledArrivalTime");  
 DriverName = rs2.getString("DriverName");  
 BusID = rs2.getString("BusID");  
  
 System.*out*.println("4 Display weekly schedule");  
  
 System.*out*.println("The Trip Number is " + TripNumber);  
 System.*out*.println("The Date is " + Date + " ");  
 System.*out*.println("THe Scheduled Start Time is " + ScheduledStartTime);  
 System.*out*.println("The Scheduled Arrival Time is " + ScheduledArrivalTime + " ");  
 System.*out*.println("THe Driver Name is " + DriverName);  
 System.*out*.println("The Bus Id is " + BusID + " ");  
  
  
 // #5 Add a driver  
 // keyboard = new Scanner(System.in);  
  
 System.*out*.println("Number 5-----------------------------------------------");  
 System.*out*.println("Enter Driver name: ");  
 DriverName = keyboard.nextLine();  
  
 System.*out*.println("Enter telephone: ");  
 String tel = keyboard.nextLine();  
  
  
 sqlInsert = "INSERT INTO Driver (DriverName, DriverTelephoneNumber) "  
 + "VALUES('" + DriverName + "', " + tel + ")";  
  
 st.executeUpdate(sqlInsert);  
 System.*out*.println("The SQL statement is: " + sqlInsert + "\n");  
  
  
  
 /\* //Check changes  
 String strSelect = "select \* from driver";  
 System.out.println("The SQL statement is: " + strSelect + "\n");  
 ResultSet driverRes = st.executeQuery(strSelect);  
 while(driverRes.next()) {  
 System.out.println(driverRes.getString("DriverName") + ", "  
 + driverRes.getInt("DriverTelephoneNumber"));  
  
 \*/  
  
 //#6 Add a bus  
  
 System.*out*.println("Number 6-----------------------------------------------");  
 System.*out*.println("Enter bus ID: ");  
 BusID = keyboard.nextLine();  
  
 System.*out*.println("Enter model: ");  
 String model = keyboard.nextLine();  
  
 System.*out*.println("Enter year: ");  
 String year = keyboard.nextLine();  
  
 keyboard.nextLine();  
  
 sqlInsert = "INSERT INTO Bus (BusID, Model, Year) VALUES"  
 + "(" + BusID + ", '" + model + "', " + year + ")";  
  
 st.executeUpdate(sqlInsert);  
  
 System.*out*.println("The SQL statement is: " + sqlInsert + "\n");  
  
  
 //Check changes  
// strSelect = "select \* from bus";  
// System.out.println("The SQL statement is: " + strSelect + "\n");  
// ResultSet newBus = stmt.executeQuery(strSelect);  
// while(newBus.next()) {  
// System.out.println(newBus.getInt("BusID") + ", "  
// + newBus.getString("Model")  
// + newBus.getInt("Year"));  
//  
// }  
  
 // #7 Delete a bus  
  
  
 System.*out*.println("Number 7-----------------------------------------------");  
 System.*out*.println("Enter busid: ");  
 BusID = keyboard.nextLine();  
  
 keyboard.nextLine();  
  
 sqlDelete = "DELETE FROM Bus WHERE BusID = " + BusID;  
 System.*out*.println("SQL command: " + sqlDelete + "\n");  
  
 st.executeUpdate(sqlDelete);  
  
  
 //Number 8  
  
  
  
 System.*out*.println("Number 8-----------------------------------------------");  
  
 System.*out*.println("Enter tripnum: ");  
 tripnum = keyboard.nextInt();  
  
 System.*out*.println("Enter date: ");  
 userdate = keyboard.nextLine();  
  
 System.*out*.println("Enter start time: ");  
 usertime = keyboard.nextLine();  
  
 System.*out*.println("Enter arrival time: ");  
 useratime = keyboard.nextLine();  
  
 System.*out*.println("Enter actual start time: ");  
 String usertime1 = keyboard.nextLine();  
  
 System.*out*.println("Enter actual arrival time: ");  
 String useratime1 = keyboard.nextLine();  
  
  
 System.*out*.println("Enter stop number: ");  
 String stopnum = keyboard.nextLine();  
 keyboard.nextLine();  
  
  
 System.*out*.println("Enter num of passengers in: ");  
 String passIn = keyboard.nextLine();  
 keyboard.nextLine();  
  
  
 System.*out*.println("Enter num of passengers out: ");  
 String passOut = keyboard.nextLine();  
  
 keyboard.nextLine();  
  
 sqlInsert = "INSERT INTO ActualTripStopInfo (TripNumber, Date, ScheduledStartTime, StopNumber, " +  
 "ScheduledArrivalTime, ActualStartTime, ActualArrivalTime, " +  
 "NumberOfPassengerIn, NumberOfPassengerOut) VALUES"  
 + "(" + tripnum + ", '" + userdate + "', " + usertime + "', " + stopnum + ", '"  
 + useratime + "', '" + usertime1 + "', '" + useratime1 + ", " + passIn + ", " + passOut + ")";  
  
 System.*out*.println("The SQL statement is: " + sqlInsert + "\n");  
  
  
 //Check changes  
 strSelect = "select \* from actualtripstopinfo";  
 System.*out*.println("The SQL statement is: " + strSelect + "\n");  
 ResultSet stopinfo = st.executeQuery(strSelect);  
 while(stopinfo.next()) {  
 System.*out*.println(stopinfo.getInt("TripNumber") + ", "  
 + stopinfo.getString("Date") + ", "  
 + stopinfo.getString("ScheduledStartTime") + ", "  
 + stopinfo.getInt("StopNumber") + ", "  
 + stopinfo.getString("ScheduledArrivalTime") + ", "  
 + stopinfo.getString("ActualStartTime") + ", "  
 + stopinfo.getString("ActualArrivalTime") + ", "  
 + stopinfo.getInt("NumberOfPassengerIn")  
 + stopinfo.getInt("NumberOfPassengerOut"));  
 }  
  
 st.close();  
 con.close();  
  
  
 ;  
  
 }  
}



Graphical user interface, application

Description automatically generated

Graphical user interface

Description automatically generated

/Library/Java/JavaVirtualMachines/jdk-17.0.1.jdk/Contents/Home/bin/java -javaagent:/Applications/IntelliJ IDEA.app/Contents/lib/idea\_rt.jar=60968:/Applications/IntelliJ IDEA.app/Contents/bin -Dfile.encoding=UTF-8 -classpath /Users/alexandraflores/IdeaProjects/Lab4/out/production/Lab4:/Users/alexandraflores/Downloads/mysql-connector-j-8.0.32.jar Lab4

Scheduled Start Time 2023-04-27 10:30:00

Scheduled Arrival Time 2023-04-28 10:30:00 DriverName Miguel

BusID 460

Number 2 -----------------------------------------------

Enter tripnum:

789

Enter date:

Enter start time:

9

Number 2.1-----------------------------------------------

SQL command: 'DELETE FROM TripOffering WHERE TripNumber = '789' AND Date = '' AND ScheduledStartTime = ‘9'

Number 2.2-----------------------------------------------

Enter tripnum:

209

Enter date:

Enter start time:

6789

Enter arrival time:

4567

Enter driver name:

d

Enter bus ID:

4589

The SQL statement is: INSERT INTO TripOffering (TripNumber, Date , ScheduledStartTime, ScheduledArrivalTime, DriverName, BusID) VALUES(209, , 6789, 4567, d , 4589)

Add record? Enter y or n:

n

The SQL statement is: select \* from tripoffering

446, 2023-04-27, 2023-04-27 10:30:00, 2023-04-28 10:30:00, Miguel460

Number 2.3-----------------------------------------------

Enter tripnum:

56789

Enter date:

Enter start time:

2345

Enter new driver name:

dfgh

The SQL statement is: UPDATE TripOffering SET DriverName = dfgh WHERE TripNumber = 56789 AND Date = '' AND ScheduledStartTime = '2345'

The SQL statement is: select \* from tripoffering where tripnumber = 56789

Number 3-----------------------------------------------

3 Display the stops of a given trip

The Trip Number is 446

The Stop Number is 50

THe sequence number is 80

The driving time is 2 hours

Number 4-----------------------------------------------

4 Display weekly schedule

The Trip Number is 446

The Date is 2023-04-27

THe Scheduled Start Time is 2023-04-27 10:30:00

The Scheduled Arrival Time is 2023-04-28 10:30:00

THe Driver Name is Miguel

The Bus Id is 460

Number 5-----------------------------------------------

Enter Driver name:

hgfdn

Enter telephone:

9097896789

The SQL statement is: INSERT INTO Driver (DriverName, DriverTelephoneNumber) VALUES('hgfdn', 9097896789)

Number 6-----------------------------------------------

Enter bus ID:

12345

Enter model:

bus

Enter year:

2090

The SQL statement is: INSERT INTO Bus (BusID, Model, Year) VALUES(12345, 'bus', 2090)

Number 7-----------------------------------------------

Enter busid:

45890

SQL command: DELETE FROM Bus WHERE BusID = 45890

Number 8-----------------------------------------------

Enter tripnum:

1209

Enter date:

Enter start time:

5689

Enter arrival time:

190

Enter actual start time:

8

Enter actual arrival time:

9

Enter stop number:

098

Enter num of passengers in:

80

Enter num of passengers out:

80

The SQL statement is: INSERT INTO ActualTripStopInfo (TripNumber, Date, ScheduledStartTime, StopNumber, ScheduledArrivalTime, ActualStartTime, ActualArrivalTime, NumberOfPassengerIn, NumberOfPassengerOut) VALUES(1209, '', 5689', 098, '190', '8', '9, 80, 80)

The SQL statement is: select \* from actualtripstopinfo

Process finished with exit code 0