Database Programs

1. Write a JDBC program to establish Database connection and create a vehicle table with columns –number, vehicle name, owner name and purchase date, and perform insert operation.

```
import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.sql.Statement;


public class vehData {

public static void main(String[] args) {

try {

        Class.forName("com.mysql.cj.jdbc.Driver");

        Connection con = DriverManager.getConnection("jdbc:mysql:///workdatabase", "root",
        "system");

        Statement s = con.createStatement();

        s.execute("create table vehicle ( veh_id varchar(10),owner_name varchar(20),city
        varchar(30) )");

        s.execute("insert into vehicle values('De12B4255','ARman','Delhi')");

        s.execute("insert into vehicle values('Mu13C4256','Asha','Mumbai')");

        s.execute("insert into vehicle values('ga14V4257','Ashwin','Goa')");

        ResultSet rs = s.executeQuery("select * from vehicle");

        if (rs != null)

        while (rs.next())

        {

                System.out.println("_____");

                System.out.println("Vehicle Id : " + rs.getString(1));
```

```
            System.out.println("Owner Name : " + rs.getString(2));
            System.out.println("City: " + rs.getString(3));
            System.out.println("_____");
        }
        s.close();
        con.close();
        } catch (SQLException err) {
            System.out.println("ERROR: " + err);
        } catch (Exception err) {
            System.out.println("ERROR: " + err);
        }
}
}
```

2. Write a JDBC program to update and view the vehicle table data.

```
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;

public class vehUpdate {
public static void main(String[] args) {
        try {
            Class.forName("com.mysql.cj.jdbc.Driver");
            Connection con = DriverManager.getConnection("jdbc:mysql:///workdatabase",
            "root", "system");
```

```
                Statement s = con.createStatement();
                s.execute("update vehicle set city='Rajasthan' where veh_id= 'Mu13C4256'");
                ResultSet rs = s.executeQuery("select * from vehicle");
                if (rs != null)
                while (rs.next())
                {
                        System.out.println("_____");
                        System.out.println("Vehicle Id : " + rs.getString(1));
                        System.out.println("Owner Name : " + rs.getString(2));
                        System.out.println("City: " + rs.getString(3));
                        System.out.println("_____");
                }
                s.close();
                con.close();
        } catch (SQLException err) {
                System.out.println("ERROR: " + err);
        } catch (Exception err) {
                System.out.println("ERROR: " + err);
        }
    }
}
```

3. Write a JDBC program to establish Database connection and create an Employee table and perform insert operation.

```
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
```

```
import java.sql.SQLException;

import java.sql.Statement;

public class EmpData {

	public static void main(String[] args) {

		try {

			Class.forName("com.mysql.cj.jdbc.Driver");

			Connection con =
		DriverManager.getConnection("jdbc:mysql:///workdatabase", "root", "system");

			Statement s = con.createStatement();

			s.execute("create table Emp ( eid integer,ename varchar(20), city
			varchar(30),dept varchar(20) )");

			s.execute("insert into Emp values(1101,'Ram','Delhi','Accounts')");

			s.execute("insert into Emp values(1102,'Shyam','Gurgaon','Sales')");

			s.execute("insert into Emp values(1103,'Sam','Agra','Stocks')");

			s.execute("insert into Emp values(1104,'Gita','Goa','HR')");

			s.execute("insert into Emp values(1105,'Sita','Bangalore','Techsupport')");

			ResultSet rs = s.executeQuery("select * from Emp");

			if (rs != null)

			while (rs.next())

			{

				System.out.println("_____");

				System.out.println("EId : " + rs.getString(1));

				System.out.println("EName : " + rs.getString(2));

				System.out.println("City: " + rs.getString(3));

				System.out.println("Dept: " + rs.getString(4));

				System.out.println("_____");

			}

			s.close();
```

```
                con.close();
            } catch (SQLException err) {
                System.out.println("ERROR: " + err);
            } catch (Exception err) {
                System.out.println("ERROR: " + err);
        }
    }
}
```

4. Write a JDBC program to update, delete and view the Employee table data.

```
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;

public class EUpDel {
public static void main(String[] args) {
        try {
            Class.forName("com.mysql.cj.jdbc.Driver");
            Connection con = DriverManager.getConnection("jdbc:mysql:///workdatabase",
            "root", "system");
            Statement s = con.createStatement();
            s.execute("update Emp set dept='Accounting' where eid=1101 ");
            s.execute("delete from Emp where eid=1102");
            ResultSet rs = s.executeQuery("select * from Emp");
            if (rs != null)
            while (rs.next())
```

```
                {
                        System.out.println("_____");
                        System.out.println("EId : " + rs.getString(1));
                        System.out.println("EName : " + rs.getString(2));
                        System.out.println("City: " + rs.getString(3));
                        System.out.println("Dept: " + rs.getString(4));
                        System.out.println("_____");
                }
                s.close();
                con.close();
        } catch (SQLException err) {
                System.out.println("ERROR: " + err);
        } catch (Exception err) {
                System.out.println("ERROR: " + err);
        }
    }
}
```