Practical no:- 18

Program code:-

1)

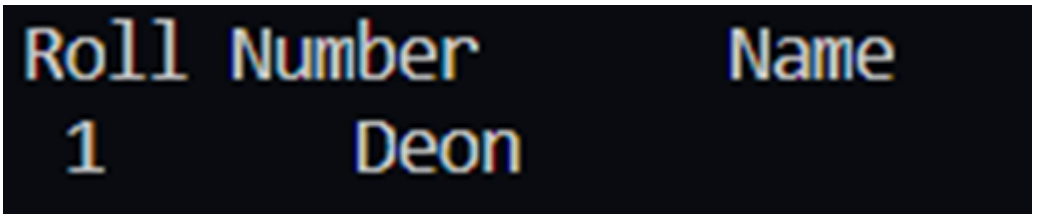
```
import java.sql.*;

class Exp18a {

	public String database =
"C:\\Users\\deong\\College\\Java\\Manual-Programs\\Experiment18\\SampleDatabas
e.accdb";



	private Connection conn;

	public void createConnection() {

	try {

	conn = DriverManager.getConnection("jdbc:ucanaccess://" + database);

	} catch (SQLException e) {

	System.out.println("Connection Failed");

	System.exit(1);

	}

	}



	public void closeConnection() {

	try {

	conn.close();

	} catch (SQLException e) {

	System.out.println("Close Connection Failed ?");

	}
```

```
        }

        public void updateQuery(String query) {
        try {
        Statement statement = conn.createStatement();
        statement.executeUpdate(query);
        } catch (SQLException e) {
        System.out.println("Error in updateQuery()");
        }
        }

        public static void main(String[] args) {
        Exp18a dbconn = new Exp18a();
        try {
         Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");
        } catch (Exception e) {
        System.out.println("Error in Loading Driver");
        }
        dbconn.createConnection();
                dbconn.updateQuery("CREATE TABLE Student (rollno COUNTER
PRIMARY KEY, name TEXT(50));");
        dbconn.updateQuery("INSERT INTO Student (name) VALUES( 'Deon')");
        }
}
```

```
import java.sql.*;


public class Exp18b {

    public String database =
"C:\\Users\\deong\\College\\Java\\Manual-Programs\\Experiment18\\SampleDatabas
e.accdb";


    private Connection conn;


    // Create Connection

    public void createConnection() {

        try {

            conn = DriverManager.getConnection("jdbc:ucanaccess://" + database);

        } catch (SQLException e) {

            System.out.println("Connection Failed");

            System.exit(1);

        }

    }


    public void closeConnection() {

        try {

            conn.close();

        } catch (SQLException e) {

            System.out.println("Close Connection Failed ?");

        }

    }
```

```
public void query() throws SQLException {
    Statement st = conn.createStatement();
    String str = "select * from student";
    ResultSet rs = st.executeQuery(str);
    String text = " ";
    System.out.println("Roll Number \t Name");
    while (rs.next()) {
      text = text + rs.getInt(1) + "\t" + rs.getString(2) + "\n";
    }
    System.out.print(text);
}

public static void main(String[] args) throws SQLException {

    Exp18b dbconn = new Exp18b();
    try {
        Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");
    } catch (Exception e) {
      System.out.println("Error in Loading Driver");
    }
    dbconn.createConnection();
    System.out.println("Connection to the database created");
    dbconn.query();
}
```

}



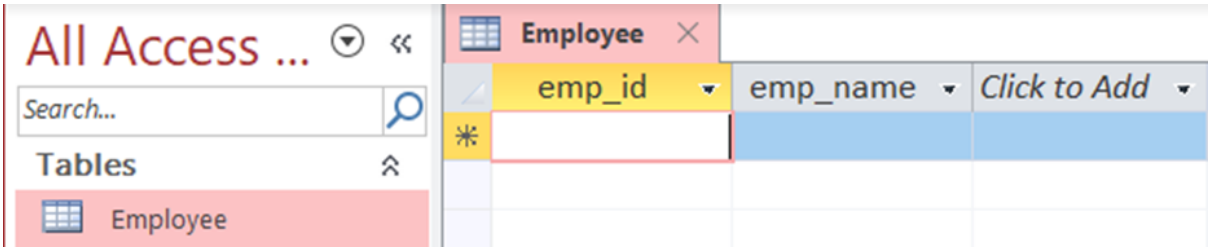
Exercise:-

1)

```
import java.sql.*;


class Exp18c {
    public String database =
"C:\\Users\\deong\\College\\Java\\Manual-Programs\\Experiment18\\SampleDatabas
e.accdb";


    private Connection conn;


    // Create Connection
    public void createConnection() {
        try {
            conn = DriverManager.getConnection("jdbc:ucanaccess://" + database);
        } catch (SQLException e) {
            System.out.println("Connection Failed");
            System.exit(1);
        }
    }
```

```
public void closeConnection() {
    try {
      conn.close();
    } catch (SQLException e) {
      System.out.println("Close Connection Failed ?");
    }
}

public void updateQuery(String query) {
    try {
      Statement statement = conn.createStatement();
      statement.executeUpdate(query);
    } catch (SQLException e) {
      System.out.println("Error in updateQuery()");
    }
}

public static void main(String[] args) {
    Exp18c dbconn = new Exp18c();
    try {
       Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");
    } catch (Exception e) {
      System.out.println("Error in Loading Driver");
    }
    dbconn.createConnection();
```

```
        dbconn.updateQuery("DROP TABLE Employee;");

        dbconn.updateQuery("CREATE TABLE Employee (emp_id INTEGER
PRIMARY KEY, emp_name VARCHAR(50));");

    }

}
```



2)

```
import java.sql.*;


class Exp18d {

    public String database =
"C:\\Users\\deong\\College\\Java\\Manual-Programs\\Experiment18\\SampleDatabas
e.accdb";


    private Connection conn;


    // Create Connection

    public void createConnection() {

        try {

            conn = DriverManager.getConnection("jdbc:ucanaccess://" + database);

        } catch (SQLException e) {
```

```
            System.out.println("Connection Failed");
            System.exit(1);
        }
    }

    public void closeConnection() {
        try {
            conn.close();
        } catch (SQLException e) {
            System.out.println("Close Connection Failed ?");
        }
    }

    public void printStudents(String where) {
        try {
            Statement statement = conn.createStatement();
            ResultSet resultSet = statement.executeQuery("SELECT * FROM Students
WHERE " + where + ";");

            while (resultSet.next()) {
                    String employee = "Student " + resultSet.getString("ID") + ":" +
"\n\tName : "
                    + resultSet.getString("name") + "\n\tPercentage : " +
resultSet.getString("percentage");
                    System.out.println(employee);
            }
```

```
        } catch (SQLException e) {
            System.out.println("Error in Printing Employees With WHERE Condition");
        }
    }

    public static void main(String[] args) {
        Exp18d dbconn = new Exp18d();
        try {
            Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");
        } catch (Exception e) {
            System.out.println("Error in Loading Driver");
        }
        dbconn.createConnection();
        dbconn.printStudents("percentage > 70");
    }
}
```