EX NO:8 DATE:

DATABASE CONNECTIVITY

AIM:

To write a program for the given problem using data base connectivity

ALGORITHM:

STEP 1. Establish connection to the database
STEP 2. Create statement object
STEP 3. Execute SQL query to retrieve all records from the "untitled" table
STEP 4. Iterate over the result set
      4.1. Display movie details in a table format
STEP 5. Execute SQL query to count total number of movies
STEP 6. Display total number of movies in a table
STEP 7. Execute SQL query to calculate average price of movies
STEP 8. Display average price in a table
STEP 9. Execute SQL query to find director with highest average rating STEP
10. Display director's name in a table

PROGRAM:

```
<%@page import="java.sql.ResultSet"%>
<%@page import="java.sql.DriverManager"%>
<%@page import="java.sql.Connection"%>
<%@page contentType="text/html" pageEncoding="UTF-8" import="java.sql.*"%>
<!DOCTYPE html>
<html>
   <head>
      <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>JSP Page</title>
   </head>
   <body>
      <% Connection c=DriverManager.getConnection("jdbc:derby://localhost:1527/movies");
      Statement st=c.createStatement();
      ResultSet rs=st.executeQuery("select * from untitled");%>
      <table border="2">
         <tr><th>id</th><th>film</th><th>director</th><th>rating</th><th>price</th></tr>
<% while(rs.next())
      {%>
      <tr><td><%out.println(rs.getInt(1));%></td>
      <td><%out.println(rs.getString(2));%></td>
```

```jsp
        <td><%out.println(rs.getString(3));%></td>
<td><%out.println(rs.getString(4));%></td>
        <td><%out.println(rs.getInt(5));%></td>


        <%}
%>
</table><br><br>
    <%
    ResultSet rs1=st.executeQuery("select * from untitled");
int total=0;      while(rs1.next()){          total++;
    } %>
    <table border="2">
      <tr><th>Total number of movies</th></tr>
      <tr><td><%= total %>;</td></tr>
    </table>
    </table><br><br>
    <%
    ResultSet rs2=st.executeQuery("select AVG(price) as avg_price from untitled");
int avg=0;      while(rs2.next()){
      avg=rs2.getInt("avg_price");
    } %>
    <table border="2">
      <tr><th>average</th></tr>
      <tr><td><%= avg %>;</td></tr>
    </table>

    </table><br><br>
    <%

    ResultSet rs3 = st.executeQuery("SELECT director FROM untitled GROUP BY director
ORDER BY AVG(rating) DESC");
    String topDirector = "";
    if (rs3.next()) {
      topDirector = rs3.getString("director");


    } %>
    <table border="2">
      <tr><th>category with highest total</th></tr>
      <tr><td><%= topDirector %>;</td></tr>
    </table>
  </body>
</html>
```

OUTPUT:

id	film	director	rating	price
1	Harry potter	JK Rowling	10	5000
2	Baahubali	Rajamouli	9	2000
3	Vikram	Lokesh	8	500
4	Bigil	Atlee	7	650
5	Stranger things	Duffer brothers	10	3000

Total number of movies
5;

average
2230;

category with highest total
JK Rowling:

Code/Output (20)	
Quiz (5)	
Record (5)	
Total (30)	
Initial	

RESULT:

The program for the given problem is executed and output is verified successfully