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import java.io.DataOutputStream;
import java.io.IOException;
import java.sql.*;
import java.util.Scanner;
public class database {
public static Connection con;
public static Statement st;

public static void print(String s,int num)
{
    {
        if(s==null)
            num=30-4;
        else
            num=num-s.length();

        System.out.print(" "+s);
        for(int i=0;i<num;i++)
        {
            System.out.print(" ");
        }
        System.out.print("|");
    }

}

public static void queryexecute(String query)
{
    try {
        ResultSet rs1 = st.executeQuery(query);
        ResultSetMetaData rsmd;
        rsmd = rs1.getMetaData();
        System.out.println();
        for(int j=0;j<30*rsmd.getColumnCount()+rsmd.getColumnCount()+4;j++)
        {
            System.out.print("-");
        }
        System.out.println();
        for(int i=1;i<=rsmd.getColumnCount();i++)
        {
            if(i==1)
                System.out.print("|");
            String s=rsmd.getColumnName(i);
            print(s,30);
        }
        System.out.println();
        for(int j=0;j<30*rsmd.getColumnCount()+rsmd.getColumnCount()+4;j++)
        {
            System.out.print("-");
        }
        System.out.println();
        while(rs1.next())
        {

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        for(int i=1;i<=rsmd.getColumnCount();i++)
        {
            if(i==1)
                System.out.print("|");
            // int len=rs1.getString(i).length();
            print(rs1.getString(i),30);
        }
        System.out.println();

    }
    for(int j=0;j<30*rsmd.getColumnCount()+rsmd.getColumnCount()+4;j++)
    {
        System.out.print("-");
    }
    System.out.println();

} catch (SQLException e) {
    // TODO Auto-generated catch block
    e.printStackTrace();
}

}

public static void main(String[]args) throws Exception
{
    String query="";
    String url="jdbc:mysql://localhost:3306/professor";
    String uname="root";
    String pass="";
    //String query="select*from Customer where cust_no=2";
    Class.forName("com.mysql.cj.jdbc.Driver");
    con=DriverManager.getConnection(url, uname, pass);
    st=con.createStatement();
    String str="";
    Scanner sc=new Scanner(System.in);
    int ch,flag=0;
    while(true)
    {
        System.out.println("\n1 Insert at least 10 records in customer table and insert other tables accordingly");
        System.out.println("2 Display all customer details with city pune and mumbai and customer first name starting with 'p' or 'h'.");
        System.out.println("3 lists the number of different customer cities");
        System.out.println("4 Give 5% increase in price of the books with publishing year 2015");
        System.out.println("5 Delete customer details living in pune");
        System.out.println("6 Find the names of authors living in India or Australia");
        System.out.println("7 Find the publishers who are established in year 2015 as well as in 2016");
        System.out.println("8 Find the book having maximum price and find titles of book having price between 300 and 400.");
        System.out.println("9 Display all titles of books with price and published year in decreasing order of publishing year");
        System.out.println("10 Display title,author_no and publisher_no of all books published in 2000,2004,2006.");
        System.out.println("99 Exit\n");
        ch=sc.nextInt();
        switch(ch)
        {

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case 1 : int choice;
System.out.println("1 Customer"+"\\t"+"2 order"+"\\t"+"3 book"+"\\t"+"4 author"+"\\t"+"5 Publisher");
choice=sc.nextInt();
switch(choice)
{
case 1 : str="select * from Customer;";
        queryexecute(str);
        break;
case 2 : str="select*from order;";
        queryexecute(str);
        break;
case 3 : str="select * from book;";
        queryexecute(str);
        break;
case 4 : str="select *from author;";
        queryexecute(str);
        break;
case 5 : str="select* from publisher;";
        queryexecute(str);
        break;
}
break;

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case 2 : str="select * from Customer where (city='Pune' or city='Mumbai') and (cust_fname like 'p%' or cust_fname like '%h') ";";
        queryexecute(str);
        break;
case 3 : str="select count(distinct(city)) from Customer;";
        queryexecute(str);
        break;
case 4 : str="update book set unit_price= unit_price + 0.05 where pub_year=2015;";
        queryexecute(str);
        break;
case 5 : str="delete from Customer where city='Pune';";
        queryexecute(str);
        break;
case 6 : str="select * from author where country='India' or country='Australia';";
        queryexecute(str);
        break;
case 7 : str="select * from publisher where year=2015 and year=2016;";
        queryexecute(str);
        break;
case 8 : str="select max(unit_price) from book where unit_price between 300 and 400;";
        queryexecute(str);
        break;
case 9: str="select title ,unit_price, pub_year from book order by pub_year Desc;";
        queryexecute(str);
        break;
case 10: str="select title, author_no, publisher_no from book where pub_year in (2000,2004,2006);";
        queryexecute(str);
        break;
case 99: flag=1;
        break;
}

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    if(flag==1)
    {
        flag=0;
        break;
    }
}
st.close();
con.close();

}
}
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