//A.SHOP CATALOGUE CLASS

```java
import java.sql.*;
import java.util.ArrayList;

public class ShopCatalogue {
    private int id;
    private String name;
    private int price;

    static final String DB_URL ="jdbc:mysql://localhost/shopcatalogue";
    static final String USER = "postgres";
    static final String PASS = null;
    Connection conn = null;
    Statement stmt = null;
    PreparedStatement pstmt = null;

    public ShopCatalogue(String name, int price) {

        this.name = name;
        this.price = price;
    }
    public ShopCatalogue() {

    }

    public int getId() {
        return id;
    }

    public void setId(int id) {
        this.id = id;
    }

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }

    public int getPrice() {
```

```java
        return price;
    }

    public void setPrice(int price) {
        this.price = price;
    }



    public void displayAll() {
        try {

            conn = DriverManager.getConnection(DB_URL, USER, PASS);

            stmt = conn.createStatement();
            String sql;

            sql = "SELECT * FROM items";
            ResultSet rs = stmt.executeQuery(sql);


            while (rs.next()) {
                //Retrieve by column name
                this.id = rs.getInt("id");
                this.name = rs.getString("name");
                this.price = rs.getInt("price");


                //Display values
                System.out.print("ID: " + this.id);
                System.out.print(", Name: " + this.name);
                System.out.println(", Price: " + this.price);
            }

            rs.close();
            stmt.close();
            conn.close();

        } catch (SQLException se) {
            se.printStackTrace();
        } catch (Exception e) {
            e.printStackTrace();
        } finally {
            try {
                if (stmt != null)
                    stmt.close();
            } catch (SQLException se2) {
            }// nothing we can do
            try {
```

```java
                    if (conn != null)
                        conn.close();
                } catch (SQLException se) {
                    se.printStackTrace();
                }
            }
        }

    public Integer purchase(ArrayList<Integer> purchaseItemIds) {
        int total =0;

            try {

                conn = DriverManager.getConnection(DB_URL, USER, PASS);

                for(Integer entryId : purchaseItemIds) {
                    pstmt = conn.prepareStatement("SELECT * FROM items WHERE
id = ?");

                    pstmt.setInt(1, entryId);


                    ResultSet rs = pstmt.executeQuery();


                    while (rs.next()) {
                        this.id = rs.getInt("id");
                        this.name = rs.getString("name");
                        this.price = rs.getInt("price");


                        System.out.print("ID: " + this.id);
                        System.out.print(", Name: " + this.name);
                        System.out.println(", Price: " + this.price);
                        total += this.price;


                    }
                }


//                  rs.close();
                    pstmt.close();
                    conn.close();

            } catch (SQLException se) {
                se.printStackTrace();
            } catch (Exception e) {
                e.printStackTrace();
            } finally {
                try {
```

```java
                    if (pstmt != null)
                        pstmt.close();
                } catch (SQLException se2) {
                }
                try {
                    if (conn != null)
                        conn.close();
                } catch (SQLException se) {
                    se.printStackTrace();
                }
            }

        return  total;
    }

    public void addItemToCatalogue() {
        try {

            conn = DriverManager.getConnection(DB_URL, USER, PASS);
            pstmt = conn.prepareStatement("INSERT INTO items(name,price)
VALUES(?,?)");
            pstmt.setString(1,this.name);
            pstmt.setInt(2, this.price);

            int i = pstmt.executeUpdate();
            System.out.println("Record: "+ i);



            pstmt.close();
            conn.close();

        } catch (SQLException se) {
            se.printStackTrace();
        } catch (Exception e) {
            e.printStackTrace();
        } finally {
            try {
                if (stmt != null)
                    stmt.close();
            } catch (SQLException se2) {
            }
            try {
                if (conn != null)
                    conn.close();
            } catch (SQLException se) {
                se.printStackTrace();
            }
        }
```

```
    }




}




```
//B.IMPLEMENTATION CLASS

```java
import java.sql.*;
import java.util.ArrayList;
import java.util.List;
import java.util.Scanner;

public class App {




    public static void main(String[] args) {
        ShopCatalogue item1 = new ShopCatalogue("teaLeaves",200);
        ShopCatalogue item2 = new ShopCatalogue("soda",80);
        ShopCatalogue item6 = new ShopCatalogue("bread",55);
        ShopCatalogue item3 = new ShopCatalogue("choclate",250);
        ShopCatalogue item4 = new ShopCatalogue("earBuds",75);
        ShopCatalogue item5 = new ShopCatalogue("milk",55);

        item1.addItemToCatalogue();
        item2.addItemToCatalogue();
        item3.addItemToCatalogue();
        item4.addItemToCatalogue();
        item5.addItemToCatalogue();
        item6.addItemToCatalogue();


        System.out.println("Welcome To Our Shop");
        System.out.println(">>>>>>>>>>>>>>>>>Shop's Catalogue
Items<<<<<<<<<<<<");
        ShopCatalogue currentShopCatalogue = new ShopCatalogue();
        currentShopCatalogue.displayAll();
        boolean runningProgram = true;

    while(runningProgram){
        System.out.println("Please Choose Operation:");
        System.out.println("A. Add Items");
        System.out.println("B. Purchase Items");
```

```java
        System.out.println("D. Exit");
        Scanner scan = new Scanner(System.in);

        String operation = scan.next();
        if((operation.equals("A") || operation.equals("a")) ){
            System.out.println(">>>>>>>>>>>>>>>>>Adding New
Item<<<<<<<<<<<<");
            System.out.print("Enter Item Name:");
            String itemName= scan.next();
            System.out.print("Enter Item Price:");
            int itemPrice= scan.nextInt();
            ShopCatalogue newStoreItem = new
ShopCatalogue(itemName,itemPrice);
            newStoreItem.addItemToCatalogue();
            newStoreItem.displayAll();
            System.out.println(">>>>>>>>>>Item Added :)<<<<<<<< ");


        }else if((operation.equals("B") || operation.equals("b"))){
            System.out.println(">>>>>>>>>>>>>>>>>Enter Id Of Items To
Purchase<<<<<<<<<<<<");



            System.out.print("Enter Item ID / Press C To Checkout:");

            ArrayList<Integer> purchaseItemIds = new ArrayList<>();
            int entryId= scan.nextInt();
            purchaseItemIds.add(entryId);

            Boolean addingItems = true;
            System.out.print("Enter Item ID / Press C To Checkout:");


            while(addingItems && scan.hasNextInt()){

                System.out.print("Enter Item ID / Press C To Checkout:");

                Integer newEntryId= scan.nextInt();

                purchaseItemIds.add(newEntryId);

            }
            System.out.println("Calculting total price....");

            System.out.println("Total Price:
"+currentShopCatalogue.purchase(purchaseItemIds) ) ;
            System.out.println(">>>>>>>>>>Thank You For Shopping With Us
:)<<<<<<<< ");
```

```java
        }else if((operation.equals("D") || operation.equals("d"))){
            System.out.println(">>>>>>>>>>>>>>>Successful
Exit<<<<<<<<<<<<<<");
            runningProgram = false;
        } else{

            System.out.println("Please Enter A Valid operation letter.");
        }




        }
    }
}
```