

Lab-6 (SDC)

Submitted by:

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Part1:

1. Executed the command “use csci390;” in the workbench to access the class database.
2. Executed the command “show table;” and list of tables found is:
 - a. categories
 - b. customercustomerdemo
 - c. customerdemographics
 - d. customers
 - e. employees
 - f. employeeterritories
 - g. orderdetails
 - h. orders
 - i. products
 - j. region
 - k. sample5
 - l. sample6
 - m. shippers
 - n. suppliers

- o. territories
- p. zz_course
- q. zz_person
- r. zz_registration

3. Execute queries

a. **Select * from orders where OrderID = 10260;**

No.	Col Name	Col Value
1	OrderID	10260
2	CustomerID	OTTIK
3	EmployeeID	4
4	OrderDate	1996-07-19
5	RequiredDate	1996-08-16
6	ShippedDate	1996-07-29
7	ShipVia	1
8	Freight	55.0900
9	ShipName	Ottilies Kseladen
10	ShipAddress	Mehrheimerstr. 369
11	ShipCity	Kln
12	ShipRegion	NULL
13	ShipPostalCode	50739
14	ShipCountry	Germany

b. Select * from orderdetails where OrderID = 1026;

OrderID	ProductID	UnitPrice	Quantity	Discount
10260	41	7.7000	16	0
10260	57	15.6000	50	0
10260	62	39.4000	15	0
10260	70	12.0000	21	0

c. Select ProductID, ProductName, CategoryID from products where ProductID = 41 or ProductID = 57;

ProductID	ProductName	CategoryID
41	Jack's New England Clam Chowder	8
57	Ravioli Angelo	5

d. Select customers.CustomerID, CompanyName from orders, customers where OrderID = 10260 and orders.customerID = customers.CustomerID;

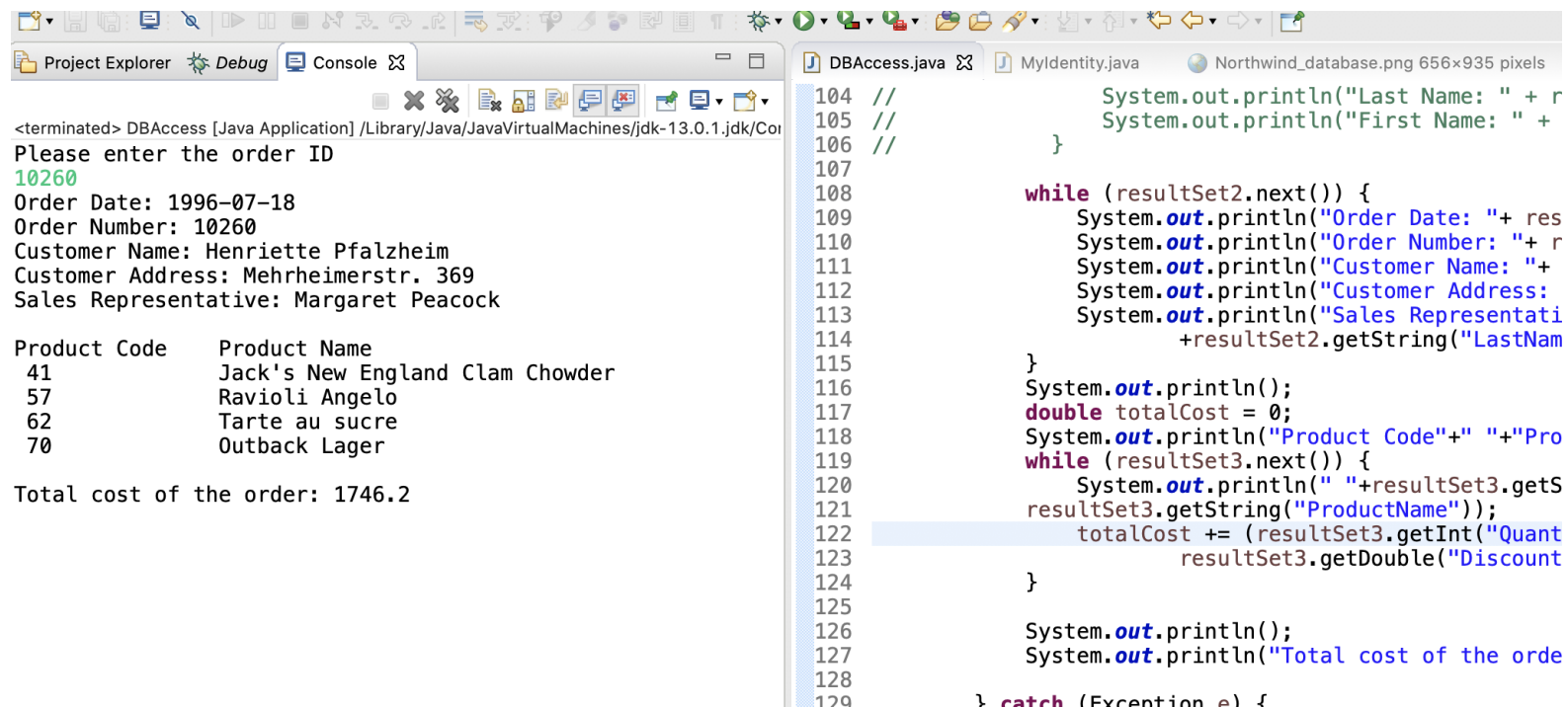
CustomerID	CompanyName
OTTIK	Ottilies Kseladen

Part 2:

Two Queries added for part 2.

Query 1: Select OrderDate,orders.OrderID,customers.CustomerID, customers.ContactName, customers.Address, employees.EmployeeID, FirstName, LastName from orders, employees, customers where OrderID = \$userInput and orders.customerID = customers.CustomerID and orders.EmployeeID = employees.EmployeeID;

Query 2: Select products.ProductID, products.ProductName, orderdetails.UnitPrice, Quantity, Discount from products, orderdetails where orderdetails.OrderID = \$userInput and orderdetails.ProductID = products.ProductID;



The screenshot displays a Java IDE with two main panes. The left pane shows the 'Console' output, and the right pane shows the 'DBAccess.java' source code.

Console Output:

```
<terminated> DBAccess [Java Application] /Library/Java/JavaVirtualMachines/jdk-13.0.1.jdk/Contents/Home
Please enter the order ID
10260
Order Date: 1996-07-18
Order Number: 10260
Customer Name: Henriette Pfalzheim
Customer Address: Mehrheimerstr. 369
Sales Representative: Margaret Peacock

Product Code    Product Name
41              Jack's New England Clam Chowder
57              Ravioli Angelo
62              Tarte au sucre
70              Outback Lager

Total cost of the order: 1746.2
```

DBAccess.java Source Code (lines 104-129):

```
104 //          System.out.println("Last Name: " + r
105 //          System.out.println("First Name: " +
106 //      }
107
108      while (resultSet2.next()) {
109          System.out.println("Order Date: " + res
110          System.out.println("Order Number: " + r
111          System.out.println("Customer Name: " +
112          System.out.println("Customer Address:
113          System.out.println("Sales Representati
114              +resultSet2.getString("LastNam
115      }
116      System.out.println();
117      double totalCost = 0;
118      System.out.println("Product Code"+" "+"Pro
119      while (resultSet3.next()) {
120          System.out.println(" "+resultSet3.getS
121          resultSet3.getString("ProductName"));
122          totalCost += (resultSet3.getInt("Quant
123              resultSet3.getDouble("Discount
124      }
125
126      System.out.println();
127      System.out.println("Total cost of the orde
128
129      } catch (Exception e) {
```

Part 3:

Plan on how you could test the correctness of your program from Part 2

- First check if connection is established or not, handle the connection error.
- As order Id is integer, make sure user enters int value
- For query1 make sure that query syntax is correct
- Handle null result set
- Handle error if query 1 is not successful
- For query2 make sure that query syntax is correct
- Handle null result set2
- Handle error if query 2 is not successful
- Check if connection is closed at the end