Table TRANSACTIONS dropped.

Table PRODUCTS dropped.

Table CUSTOMERS dropped.

Table CONTAINS dropped.

Table PRODUCT created.

Table CUSTOMER created.

Table TRANSACTIONS created.

Table TRANSACTION_CONTAINS created.

1 row inserted.

1 row inserted.

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>>Query Run In:Query Result

>>Query Run In:Query Result 1

>>Query Run In:Query Result 2
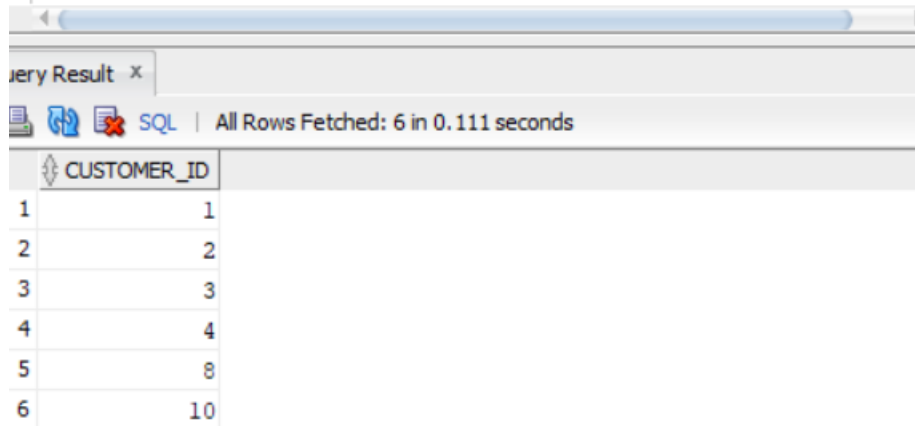
>>Query Run In:Query Result 3

Commit complete.

CS550: Database

Project 1-3

1)

```
// query 1
select customer_id
    from customer c
    where zip_code = '22030';
```
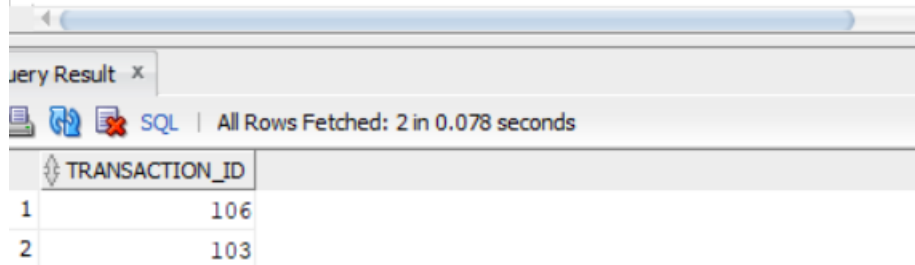
Query Result ×

SQL | All Rows Fetched: 6 in 0.111 seconds

	CUSTOMER_ID
1	1
2	2
3	3
4	4
5	8
6	10

2)

```
// query 2
select transaction_id
from TRANSACTION_CONTAINS tc join Product p
    on tc.upc = p.upc
    where p.category  = 'Deli';
```

Query Result ×

SQL | All Rows Fetched: 2 in 0.078 seconds

	TRANSACTION_ID
1	106
2	103

3)

```
17    //query 3
18  □ select distinct t.customer_id
19    from transactions t join TRANSACTION_CONTAINS tc
20        on tc.transaction_id = t.transaction_id
21      where tc.upc in (select UPC
22            from PRODUCT
23            where brand in ('Pepsi','Coca-Cola'));
24
```

Query Result ×

📌 🖨 🔄 ❌ SQL | All Rows Fetched: 4 in 0.079 seconds

	CUSTOMER_ID
1	1
2	4
3	10
4	9

4)

```
//query 4
□ select distinct t.customer_id
  from transactions t
  join TRANSACTION_CONTAINS tc
  on tc.transaction_id = t.transaction_id
  where tc.upc in (select UPC
      from PRODUCT
      where brand in ('Pepsi'))
  INTERSECT
□ select distinct t.customer_id
  from transactions t
  join TRANSACTION_CONTAINS tc
  on tc.transaction_id = t.transaction_id where
  tc.upc in (select UPC
      from PRODUCT
      where brand in ('Coca-Cola'));

//query 5
```

uery Result ×

🖨 🔄 ❌ SQL | All Rows Fetched: 2 in 0.072 seconds

	CUSTOMER_ID
1	1
2	4

5)

```
41
42    //query 5
43  ⊟ select customer_id
44    from customer
45    MINUS
46    select customer_id
47    from transactions;
48
```

Query Result ×

📌 🖨 🔁 ❌ SQL | All Rows Fetched: 5 in 0.09 seconds

	CUSTOMER_ID
1	2
2	5
3	6
4	7
5	8

6)

```
--
49    //query 6
50  ⊟ select first_name, last_name
51    from customer
52    where customer_id in (
53  ⊟ select customer_id
54    from transactions
55    group by customer_id
56    having count(*) =  1);
57
```

Query Result ×

📌 🖨 🔁 ❌ SQL | All Rows Fetched: 4 in 0.053 seconds

	FIRST_NAME	LAST_NAME
1	David	Goldenberg
2	Greg	Jennings
3	John	Wayne
4	Jennifer	Johnson

7)

```
//query 7

SELECT c.customer_ID, SUM(tc.quantity) AS total_quantity
FROM Transactions t
JOIN Transaction_Contains tc ON t.transaction_ID = tc.transaction_ID
JOIN Product p ON tc.UPC = p.UPC
JOIN Customer c ON t.customer_ID = c.customer_ID
WHERE c.age >= 30
GROUP BY c.customer_ID;
```

ery Result ×

SQL | All Rows Fetched: 3 in 0.085 seconds

	CUSTOMER_ID	TOTAL_QUANTITY
1	1	23
2	3	5
3	9	14

8)

```
//query 8

select distinct  customer_id
from customer c where not exists
((select UPC
    from product p
   where p.category = 'Dairy') MINUS (select UPC
        from Transactions t, Transaction_Contains tc
        where t.transaction_id = tc.transaction_id and
            t.customer_id = c.customer_id));
```

ery Result ×

SQL | All Rows Fetched: 2 in 0.095 seconds

	CUSTOMER_ID
1	9
2	10