**Lab-6 (Activity)**

group: ECommerce

CUSTOMER = {

customer\_id:number, first\_name:string, last\_name:string, mobile\_number:number

101,"Aastha","Kumari",123451200

102,"Manas","Srivastava",879253586025

103,"Shaurya","Kumar",1234567890

104,"Shayanto","Karmakar",432156789

105,"Ekata","Kumari",321846355

}

PRODUCT={

customer\_id:number,product\_id:number,product\_name:string,product\_disc:string,category\_id:number

101,1,"lower","blue color cotton lower",222

102,2,"Tshirt","pink color cotton Tshirtr",111

103,3,"Shirt","red color cotton Shirt",111

104,4,"pant","black color cotton pant",111

105,5,"top","black color cotton top",111

}

ORDER={

customer\_id:number,order\_id:number,order\_name:string,cat\_id:number,price:number

101,20,"AXX",222,2000

102,21,"BXX",111,200

103,22,"CXX",111,1000

104,23,"DXX",111,10000

105,24,"EXX",222,1098

}

CATEGORY={

category\_id:number,category\_name:string

111,"male"

222,"Female"

}

ECommerce use group in editor

* CUSTOMER

| **CUSTOMER.customer\_id** | **CUSTOMER.first\_name** | **CUSTOMER.last\_name** | **CUSTOMER.mobile\_number** |
| --- | --- | --- | --- |
| 101 | 'Aastha' | 'Kumari' | 123451200 |
| 102 | 'Manas' | 'Srivastava' | 879253586025 |
| 103 | 'Shaurya' | 'Kumar' | 1234567890 |
| 104 | 'Shayanto' | 'Karmakar' | 432156789 |
| 105 | 'Ekata' | 'Kumari' | 321846355 |

* PRODUCT

| **PRODUCT.customer\_id** | **PRODUCT.product\_id** | **PRODUCT.product\_name** | **PRODUCT.product\_disc** | **PRODUCT.category\_id** |
| --- | --- | --- | --- | --- |
| 101 | 1 | 'lower' | 'blue color cotton lower' | 222 |
| 102 | 2 | 'Tshirt' | 'pink color cotton Tshirtr' | 111 |
| 103 | 3 | 'Shirt' | 'red color cotton Shirt' | 111 |
| 104 | 4 | 'pant' | 'black color cotton pant' | 111 |
| 105 | 5 | 'top' | 'black color cotton top' | 111 |

* ORDER

| **ORDER.customer\_id** | **ORDER.order\_id** | **ORDER.order\_name** | **ORDER.category\_id** | **ORDER.price** |
| --- | --- | --- | --- | --- |
| 101 | 20 | 'AXX' | 222 | 8000 |
| 102 | 21 | 'BXX' | 111 | 4000 |
| 103 | 22 | 'CXX' | 111 | 1000 |
| 104 | 23 | 'DXX' | 111 | 10000 |
| 105 | 24 | 'EXX' | 222 | 1098 |

* CATEGORY

| **CATEGORY.category\_id** | **CATEGORY.category\_name** |
| --- | --- |
| 111 | 'male' |
| 222 | 'Female' |

**QUERIES IN SQL AND RELATIONAL ALGEBRA:**

|  |  |  |
| --- | --- | --- |
| 1 | Find order details of all customer | |
|  | select \* from ORDER; | π customer\_id,order\_id,order\_name,  cat\_id,price (ORDER) |
| 2 | Find product details of all customers. | |
|  | select \* from PRODUCT; | π customer\_id,product\_id,  product\_name,  product\_disc,category\_id(PRODUCT) |
| 3 | Find product ID and order ID whose order name is AXX . | |
|  | select product\_id,order\_id from PRODUCT join ORDER on PRODUCT.customer\_id=ORDER.customer\_id where order\_name='AXX' | π product\_id,order\_id (σorder\_name='AXX'(PRODUCT⨝ORDER)) |
| 4 | Find categoryID and category Name whose customer ID is 104. | |
|  | select PRODUCT.category\_id,category\_name from PRODUCT left outer join CATEGORY on PRODUCT.category\_id=CATEGORY.category\_id where customer\_id=104; | π category\_id,category\_name (σcustomer\_id=104(PRODUCT⟕CATEGORY)  ) |
| 5 | Find the product description of order DXX. | |
|  | select product\_disc from PRODUCT left join ORDER on PRODUCT.customer\_id=ORDER.customer\_id where order\_name='DXX' | π product\_disc σorder\_name='DXX'(PRODUCT⟕ORDER) |
| 6 | Find category ID and product name of all products | |
|  | select CATEGORY.category\_id ,product\_name from PRODUCT join CATEGORY on PRODUCT.category\_id=CATEGORY.category\_id | π category\_id,product\_name  (PRODUCT⨝CATEGORY) |
| 7 | Find category name product name and description of all products. | |
|  | select CATEGORY.category\_name,product\_name,  product\_disc from PRODUCT right outer  join CATEGORY on PRODUCT.category\_id=CATEGORY.category\_id | πcategory\_name,product\_name,product\_  disc  (PRODUCT⟖CATEGORY) |
| 8 | Find customerID , first name , last name and product id of all customer who purchased something. | |
|  | select CUSTOMER.customer\_id,first\_name,last\_  name,product\_id from PRODUCT full outer join CUSTOMER on PRODUCT.customer\_id=CUSTOMER.customer\_id | π CUSTOMER.customer\_id,first\_name,  last\_name,  product\_id(PRODUCT⟗CUSTOMER) |
| 9 | Find customerID and First name of customers whose price is greater than 2000. | |
|  | select CUSTOMER.customer\_id,first\_name from CUSTOMER join ORDER on CUSTOMER.customer\_id=ORDER.customer\_id where price>2000 | π customer\_id,first\_name(σprice>2000  (CUSTOMER⨝PRODUCT⨝ORDER)) |
| 10 | Find customerID ,order name ,orderID and price whose price is greater then equal  to 4000 and order ID is 23. | |
|  | select ORDER.customer\_id , order\_name ,order\_id ,price from PRODUCT join ORDER on PRODUCT.customer\_id=ORDER.customer\_id where price>=4000 AND order\_id= 23 | π customer\_id,order\_name,order\_id,price  (σprice>=4000 and order\_id=23  (PRODUCT⨝ORDER)) |
| 11 | Find details of customer ID 104 | |
|  | SELECT \* FROM CUSTOMER WHERE customer\_id=104 | σcustomer\_id=104 (CUSTOMER) |
| 12 | Find customerID,ProductId ,Product dic ,categoryID whose customerid is 104. | |
|  | SELECT CUSTOMER.customer\_id,product\_id,product\_name  ,product\_disc,category\_id FROM CUSTOMER JOIN PRODUCT ON CUSTOMER.customer\_id=PRODUCT.customer\_id WHERE CUSTOMER.customer\_id=104 | π customer\_id,product\_id,  product\_name  ,product\_disc,  category\_id(σcustomer\_id=104 (CUSTOMER⨝PRODUCT)) |
| 13 | Find category ID and category name of category id 111. | |
|  | select category\_id, category\_name from CATEGORY where category\_id = 111 | σcategory\_id=111(CATEGORY) |
| 14 | Find the details of customer table | |
|  | select \* from CUSTOMER | π customer\_id,first\_name,last\_name,  mobile\_numbe  r(CUSTOMER) |
| 15 | Display category table. | |
|  | select \* from CATEGORY | π category\_id,category\_name  CATEGORY |

**OUTPUT SCREENSHOTS**





























