

## Database Design – 2023S

Student ID :

Student Name :

### Practical Activity 9 – SQL JOIN Operations

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Perform the following operations **using ORACLE** and provide **relevant screen shots in each case**

Use appropriate syntax and datatypes

1. Create the following table(s) and enter given data values for each table using a SQL Scripts

**a. Customers\_697(697 is last 3 digits of your student Number)**

CUSTOMERID	FIRSTNAME	LASTNAME
1	Sara	Davis
2	Rumi	Shah
3	Paul	Johnson
4	Samuel	Martinez
5	Sagara	Samarawickrama

\*\* Customer ID 5 Enter your First Name and Last\_Name

**b. Orders\_697**

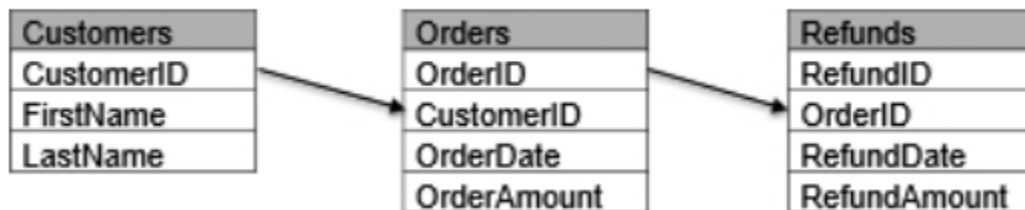
ORDERID	CUSTOMERID	ORDERDATE	ORDERAMOUNT
1	1	01-SEP-16	10
2	2	02-SEP-16	12.5
3	2	03-SEP-16	18
4	3	15-SEP-16	20
5	4	21-NOV-20	20

Hint : TO\_DATE('2020-11-21', 'YYYY/MM/DD') can be used to convert / insert date type

Note : OrderDate is a Date Type

c. **Refunds\_697**

REFUNDID	ORDERID	REFUNDDATE	REFUNDAMOUNT
1	1	02-SEP-16	5
2	3	18-SEP-16	18



Now Perform the following JOIN Operations

1. Find the Details of the Customers and their orders (only the Customers with orders)

CUSTOMERID	FIRSTNAME	LASTNAME	ORDERID	CUSTOMERID	ORDERDATE	ORDERAMOUNT
1	Sara	Davis	1	1	01-SEP-16	10
2	Rumi	Shah	2	2	02-SEP-16	12.5
2	Rumi	Shah	3	2	03-SEP-16	18
3	Paul	Johnson	4	3	15-SEP-16	20
4	Samuel	Martinez	5	4	21-NOV-20	20

Why Customer 2 appear twice ?

Why Customer 5 not appear in the output ?

2. Find the details of the customers with orders and refunds (join all 3 tables)

FIRSTNAME	LASTNAME	ORDERDATE	ORDERAMOUNT	REFUNDDATE	REFUNDAMOUNT
Sara	Davis	01-SEP-16	10	02-SEP-16	5
Rumi	Shah	03-SEP-16	18	18-SEP-16	18

Explain the output

Why only Sara and Rumi appear in the output

- Find the details of the Customers orders and refunds irrespective of whether they place orders or having refunds

FIRSTNAME	LASTNAME	ORDERDATE	ORDERAMOUNT	REFUNDDATE	REFUNDAMOUNT
Sara	Davis	01-SEP-16	10	02-SEP-16	5
Paul	Johnson	15-SEP-16	20	-	-
Samuel	Martinez	21-NOV-20	20	-	-
Sagara	Samarawickrama	-	-	-	-
Rumi	Shah	02-SEP-16	12.5	-	-
Rumi	Shah	03-SEP-16	18	18-SEP-16	18

Explain the output

Why we see NULL values in certain columns