

No.:

Date:

Part 1

```
SELECT * FROM customers;
```

```
SELECT * FROM customers;
```

```
SELECT * FROM items;
```

Part 2 : Selecting Specific Columns

```
SELECT ctr-number, first-name, last-name, email, phone-number  
FROM customers;
```

```
SELECT name, number of players  
FROM teams;
```

```
SELECT name, description, category FROM items;
```

```
SELECT first-name, last-name, current-balance, current-balance / 12 AS monthly-payment  
FROM customers;
```

```
SELECT first-name, last-name, ctr-number, current-balance, (current-balance - 500) AS  
adjusted-balance  
FROM customers;
```

There can be a negative value, if there are no contract

```
SELECT 'The ' || name || ' team has ' || number-of-players || ' players and receive a  
discount of ' || discount || ' percent.' AS "Team Information"  
FROM teams;
```

The discount value of the third team are NULL

Part 3

```
SELECT * FROM customers  
WHERE ctr_number = 'C01986';
```

```
SELECT first_name AS "First Name", last_name AS "Last Name", ctr_number AS "  
Customer Number"  
FROM customers  
WHERE current_balance > 100;
```

```
SELECT id AS "Order ID", odr_date AS "Order Date", odr_time AS "Order Time"  
FROM orders  
WHERE odr_date < TO_DATE('28-May-2019', 'DD-MM-YYYY');
```

Part 2

```
SELECT id AS "Inventory ID", cost AS "Trade Cost", units AS "Number of Units"  
FROM inventory_list  
WHERE cost BETWEEN 3.00 AND 15.00;
```

Part 3

```
SELECT id AS "Inventory ID", cost AS "Trade Cost", units AS "Number of Units"  
FROM inventory_list  
WHERE units IN (50, 100, 150, 200);
```

Part 4

```
SELECT id "Inventory ID", cost AS "Trade Cost", units AS "Number of Units"  
FROM inventory_list  
WHERE units NOT IN (50, 100, 150, 200);
```

Part 5

```
SELECT item_number AS "Item Number", name AS "Item Name"  
FROM items  
WHERE name LIKE 'g %';
```

Part 6

```
SELECT item number AS "Item Number", name AS "Item Name"  
FROM items  
WHERE name LIKE '%000%';
```

PART 4

Part 1

```
SELECT 'The ' || NAME || ' team has ' || NUMBER_OF_PLAYERS || ' players and does not  
receive a discount.' AS "TEAM INFORMATION"  
FROM teams  
WHERE discount IS NULL
```

2.

```
SELECT 'The ' || NAME || ' team has ' || NUMBER_OF_PLAYERS || ' players and receive a discount of  
' || DISCOUNT || ' percent.' AS "TEAM INFORMATION"  
FROM teams  
WHERE discount IS NOT NULL;
```


No.:

Date:

Part 2: Logical Operator AND

```
SELECT ctr_number AS "CUSTOMER NUMBER", address_line_1 AS "STREET  
ADDRESS", ZIP_CODE AS "POSTAL CODE"  
FROM CUSTOMERS_ADDRESS  
WHERE CITY = 'Liverpool' AND ADDRESS_LINE_2 = 'Starford';
```

Part 3

```
SELECT ctr_number AS "CUSTOMER NUMBER", address_line_1 AS "STREET  
ADDRESS", ZIP_CODE AS "POSTAL CODE"  
FROM customer_addresses  
WHERE CITY = 'Liverpool' OR ADDRESS_LINE_2 = 'Starford';
```

Part

```
SELECT ctr_number AS "Customer Number", address_line_1 AS "STREET ADDRESS",  
ZIP_CODE AS "POSTAL CODE"  
FROM customer_addresses  
WHERE CITY NOT IN ('Liverpool')
```

PART 5

Part 2

```
SELECT name AS 'Team Name', number_of_players AS 'Number of Players'
FROM teams
ORDER BY name
```

Part 2

```
SELECT name AS 'Team Name', number_of_players AS 'Number of Players'
FROM teams
ORDER BY number_of_players DESC;
```

PART 6


```
SELECT ROWNUM AS 'ORDER OF MEMBERSHIP', FIRST_NAME || '/' || LAST_
NAME AS 'CUSTOMERS NAME'
FROM (SELECT FIRST_NAME, LAST_NAME
FROM CUSTOMERS
ORDER BY crr_number
WHERE ROWNUM <= 3)
```

Part 2

```
SELECT FIRST_NAME || '/' || LAST_NAME AS 'SALE REPRESENTATIVES'
FROM SALES_REPRESENTATIVES
WHERE COMMISSION_RATE = : COMMISSION_RATE
ORDER BY LAST_NAME
```

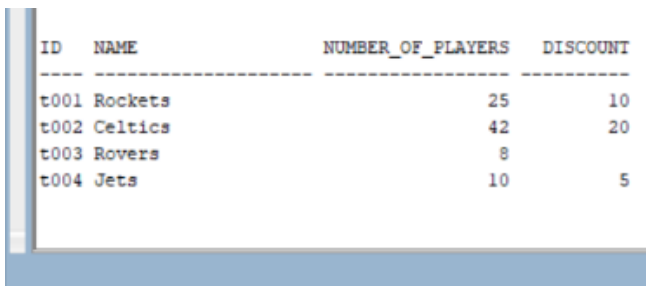
PART 1

SELECT * FROM customers;



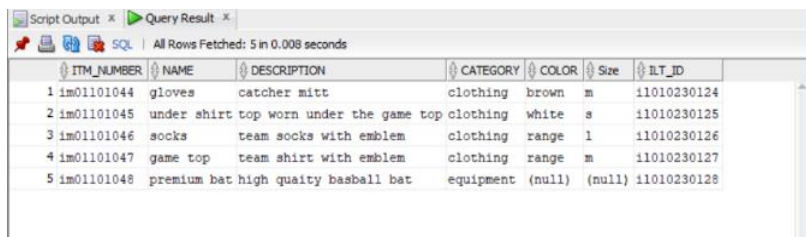
CTR_NUMBER	EMAIL	FIRST_NAME	LAST_NAME	PHONE_NUMBER	CURRENT_BALANCE	SRE_ID	TEM_ID	LOYALTY_CARD_NUMBER
1 c00001	bob.thornberry@heatmail.com	Robert	Thornberry	01234567898	150	sr01	t001	(null)
2 c00012	Jjones@freemail.com	Jennifer	Jones	01505214598	0	(null)	(null)	lc1015
3 c00101	unknown@here.com	John	Doe	03216547808	987.5	sr01	t002	(null)
4 c00103	MurciaA@globaltech.com	Andrew	Murcia	07715246890	85	(null)	(null)	lc2341
5 c01986	margal87@delphiview.com	Maria	Galant	01442736589	125.65	sr03	t003	(null)
6 c02001	brainrog@hoootech.com	Brian	Roger	01654564898	50	(null)	(null)	lc4587

SELECT * FROM teams;



ID	NAME	NUMBER_OF_PLAYERS	DISCOUNT
t001	Rockets	25	10
t002	Celtics	42	20
t003	Rovers	8	
t004	Jets	10	5

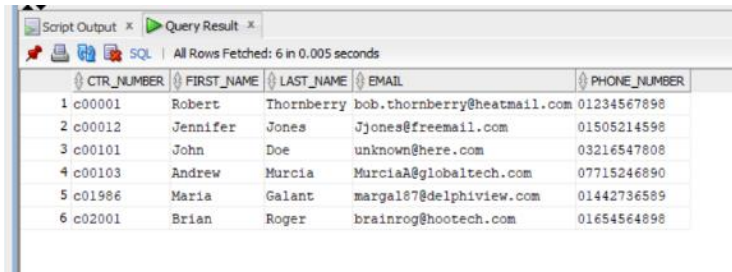
SELECT * FROM items;



ITM_NUMBER	NAME	DESCRIPTION	CATEGORY	COLOR	Size	ILT_ID
1 im01101044	gloves	catcher mitt	clothing	brown	m	11010230124
2 im01101045	under shirt	top worn under the game top	clothing	white	s	11010230125
3 im01101046	socks	team socks with emblem	clothing	range	l	11010230126
4 im01101047	game top	team shirt with emblem	clothing	range	m	11010230127
5 im01101048	premium bat	high quaity baseball bat	equipment	(null)	(null)	11010230128

Part 2: Selecting Specific Columns

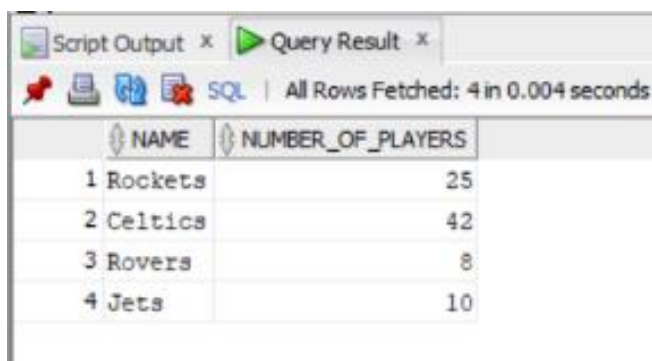
SELECT ctr_number, first_name, last_name, email, phone_number FROM customers;



The screenshot shows a SQL query result window with the following data:

	CTR_NUMBER	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER
1	c00001	Robert	Thornberry	bob.thornberry@heatmail.com	01234567898
2	c00012	Jennifer	Jones	Jjones@freemail.com	01505214598
3	c00101	John	Doe	unknown@here.com	03216547808
4	c00103	Andrew	Murcia	MurciaA@globaltech.com	07715246890
5	c01986	Maria	Galant	margal87@delphiview.com	01442736589
6	c02001	Brian	Roger	brainrog@hootech.com	01654564898

SELECT name, number_of_players FROM teams;



The screenshot shows a SQL query result window with the following data:

	NAME	NUMBER_OF_PLAYERS
1	Rockets	25
2	Celtics	42
3	Rovers	8
4	Jets	10

SELECT name, description, category FROM items;

NAME	DESCRIPTION	CATEGORY
gloves	catcher mitt	clothing
under shirt	top worn under the game top	clothing
socks	team socks with emblem	clothing
game top	team shirt with emblem	clothing
premium bat	high quality baseball bat	equipment

[illegible]

Script Output x Query Result x

SQL | All Rows Fetched: 6 in 0.014 seconds

	FIRST_NAME	LAST_NAME	CTR_NUMBER	CURRENT_BALANCE	ADJUSTED_BALANCE
1	Robert	Thornberry	c00001	150	145
2	Jennifer	Jones	c00012	0	-5
3	John	Doe	c00101	987.5	982.5
4	Andrew	Murcia	c00103	85	80
5	Maria	Galant	c01986	125.65	120.65
6	Brian	Roger	c02001	50	45



Script Output x Query Result x

SQL | All Rows Fetched: 4 in 0.006 seconds

Team Information

1 The Rockets team has 25 players and receives adiscount of 10 percent.
2 The Celtics team has 42 players and receives adiscount of 20 percent.
3 The Rovers team has 8 players and receives adiscount of percent.
4 The Jets team has 10 players and receives adiscount of 5 percent.

2.The discount value of the third team is NULL that is why it is not shown.

PART 3

```
SELECT * FROM customers WHERE ctr_number = 'c01986';
```



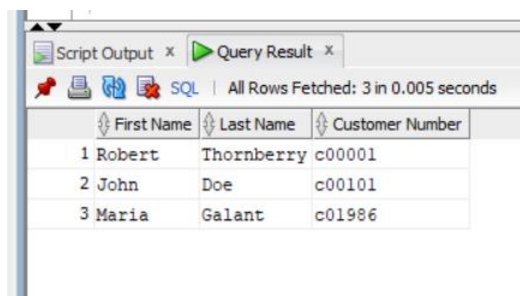
A screenshot of a SQL query result window showing a single row for customer c01986. The window title is "SQL" and it indicates "All Rows Fetched: 1 in 0.004 seconds". The table has columns: CTR_NUMBER, EMAIL, FIRST_NAME, LAST_NAME, PHONE_NUMBER, CURRENT_BALANCE, SRE_ID, TEM_ID, and LOYALTY_CARD_NUMBER.

CTR_NUMBER	EMAIL	FIRST_NAME	LAST_NAME	PHONE_NUMBER	CURRENT_BALANCE	SRE_ID	TEM_ID	LOYALTY_CARD_NUMBER
1 c01986	margal87@delphiview.com	Maria	Galant	01442736589	125.65	sr03	t003	(null)

```
2.SELECT first_name AS "First Name", last_name AS "Last Name", ctr_number AS "Customer Number"
```

```
FROM customers
```

```
WHERE current_balance > 100;
```



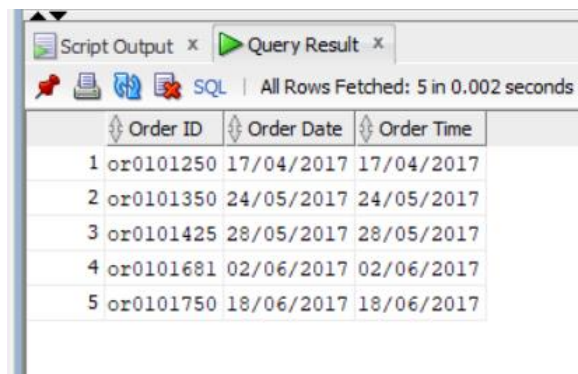
A screenshot of a SQL query result window showing three rows of customer data. The window title is "SQL" and it indicates "All Rows Fetched: 3 in 0.005 seconds". The table has columns: First Name, Last Name, and Customer Number.

First Name	Last Name	Customer Number
1 Robert	Thornberry	c00001
2 John	Doe	c00101
3 Maria	Galant	c01986

```
3.SELECT id AS "Order ID", odr_date AS "Order Date", odr_time AS "Order Time"
```

```
FROM orders
```

```
WHERE odr_date < TO_DATE('28-May-2019', 'DD-MM-YYYY');
```



A screenshot of a SQL query result window showing five rows of order data. The window title is "SQL" and it indicates "All Rows Fetched: 5 in 0.002 seconds". The table has columns: Order ID, Order Date, and Order Time.

Order ID	Order Date	Order Time
1 or0101250	17/04/2017	17/04/2017
2 or0101350	24/05/2017	24/05/2017
3 or0101425	28/05/2017	28/05/2017
4 or0101681	02/06/2017	02/06/2017
5 or0101750	18/06/2017	18/06/2017

PART 2

```
SELECT id AS "Inventory ID", cost AS "Trade Cost", units AS "Number of Units"
```

```
FROM inventory_list
```

```
WHERE cost BETWEEN 3.00 AND 15.00;
```

Script Output x Query Result x
All Rows Fetched: 2 in 0.008 seconds

	Inventory ID	Trade Cost	Number of Units
1	i1010230125	7.99	250
2	i1010230126	5.24	87

PART 3 SELECT id AS "Inventory ID", cost AS "Trade Cost", units AS "Number of Units"
FROM inventory_list
WHERE units IN (50, 100, 150, 200);

Script Output x Query Result x
All Rows Fetched: 1 in 0.004 seconds

	Inventory ID	Trade Cost	Number of Units
1	i1010230124	2.5	100

PART 4.SELECT id AS "Inventory ID", cost AS "Trade Cost", units AS "Number of Units"
FROM inventory_list
WHERE units NOT IN (50, 100, 150, 200);

Script Output x Query Result x
All Rows Fetched: 4 in 0.004 seconds

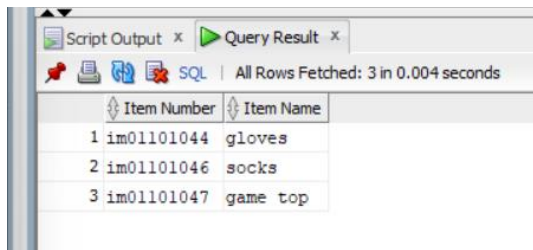
	Inventory ID	Trade Cost	Number of Units
1	i1010230125	7.99	250
2	i1010230126	5.24	87
3	i1010230127	18.95	65
4	i1010230128	97.46	8

PART 5.SELECT itm_number AS "Item Number", name AS "Item Name"
FROM items
WHERE name LIKE 'g%';

Script Output x Query Result x
All Rows Fetched: 2 in 0.012 seconds

	Item Number	Item Name
1	im01101044	gloves
2	im01101047	game top

PART 6.SELECT itm_number AS "Item Number", name AS "Item Name"
FROM items
WHERE name LIKE '%o%';



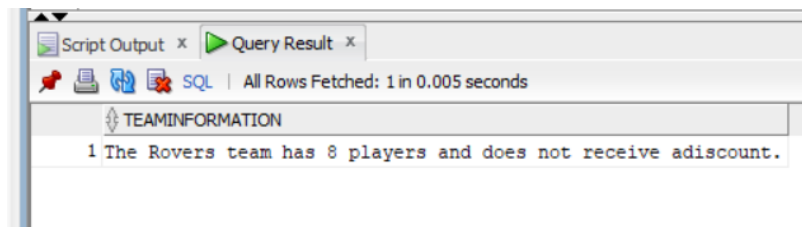
Item Number	Item Name
1 im01101044	gloves
2 im01101046	socks
3 im01101047	game top

PART 4

Part 1:

Using the NULL Conditions 1. Write a query that will display information for teams that don't receive a discount in the following format: The Rovers team has 25 players and does not receive a discount. Use Team Information as the column alias.

```
SELECT 'The ' || NAME || ' team has ' || NUMBER_OF_PLAYERS || ' players and does not receive a discount.' AS "TEAM INFORMATION" FROM TEAMS WHERE DISCOUNT IS NULL;
```



TEAM INFORMATION
1 The Rovers team has 8 players and does not receive a discount.

2. Write a query that will display information for only teams that receive a discount in the following format: The Rockets team has 25 players and receives a discount of 10 percent. Use Team Information as the column alias.

```
SELECT 'The ' || NAME || ' team has ' || NUMBER_OF_PLAYERS || ' players and receives a discount of ' || DISCOUNT || ' percent.' AS "TEAM INFORMATION"
```

```
FROM TEAMS
```

```
WHERE DISCOUNT IS NOT NULL;
```



TEAM INFORMATION
1 The Rockets team has 25 players and receives a discount of 10 percent.
2 The Celtics team has 42 players and receives a discount of 20 percent.
3 The Jets team has 10 players and receives a discount of 5 percent.

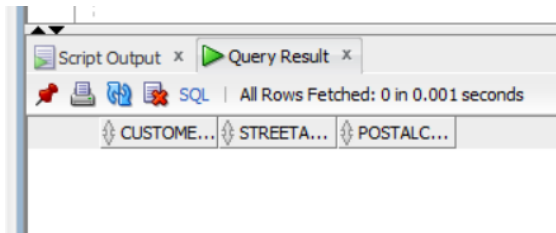
Part 2: Logical Operators: AND

Write a query that will display the customer number, address line 1 and postal code for customers that live in the starford area of Liverpool. Use Customer Number, Street Address and Postal Code as the column aliases.

```
SELECT CTR_NUMBER AS "CUSTOMER NUMBER",ADDRESS_LINE_1 AS "STREET ADDRESS",ZIP_CODE  
AS "POSTAL CODE"
```

```
FROM CUSTOMERS_ADDRESSES
```

```
WHERE CITY='Liverpool' AND ADDRESS_LINE_2='Starford';
```



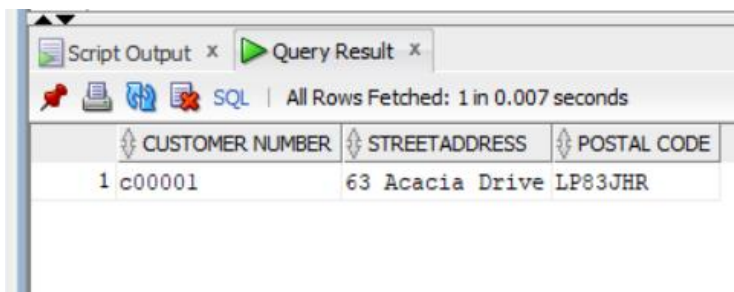
Part 3:

Logical Operators: OR 1. Write a query that will display the customer number, address line 1 and postal code for customers that live in either starford or Liverpool in general. Use Customer Number, Street Address and Postal Code as the column Aliases.

```
SELECT CTR_NUMBER AS "CUSTOMER NUMBER",ADDRESS_LINE_1 AS "STREET ADDRESS",ZIP_CODE  
AS "POSTAL CODE"
```

```
FROM CUSTOMERS_ADDRESSES
```

```
WHERE CITY='Liverpool' OR ADDRESS_LINE_2='Starford';
```



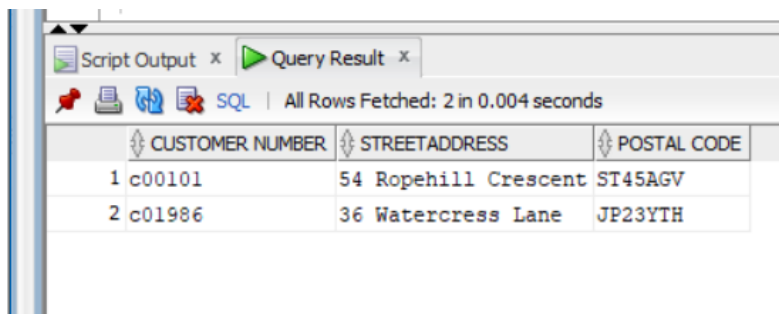
Part 4:

Logical Operators: NOT Equal To 1. Write a query that will display the customer number, address line 1 and postal code for customers that do not live in Liverpool. Use Customer Number, Street Address and Postal Code as the column aliases.

```
SELECT CTR_NUMBER AS "CUSTOMER NUMBER",ADDRESS_LINE_1 AS "STREET ADDRESS",ZIP_CODE  
AS "POSTAL CODE"
```

```
FROM CUSTOMERS_ADDRESSES
```

```
WHERE CITY NOT IN ('Liverpool')
```



The screenshot shows a SQL query result window with two tabs: 'Script Output' and 'Query Result'. The 'Query Result' tab is active, displaying a table with three columns: 'CUSTOMER NUMBER', 'STREETADDRESS', and 'POSTAL CODE'. The table contains two rows of data. The first row has a customer number of 'c00101', a street address of '54 Ropehill Crescent', and a postal code of 'ST45AGV'. The second row has a customer number of 'c01986', a street address of '36 Watercress Lane', and a postal code of 'JP23YTH'. The status bar at the top of the window indicates 'All Rows Fetched: 2 in 0.004 seconds'.

	CUSTOMER NUMBER	STREETADDRESS	POSTAL CODE
1	c00101	54 Ropehill Crescent	ST45AGV
2	c01986	36 Watercress Lane	JP23YTH

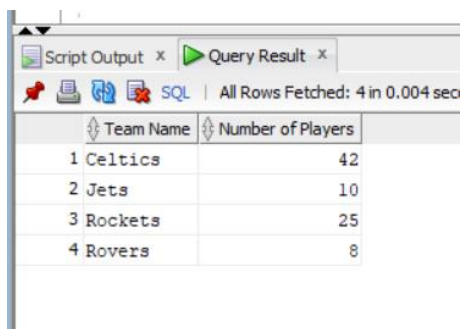
PART 5

Part 1 :

```
SELECT name AS "Team Name", number_of_players AS "Number of Players"
```

```
FROM teams
```

```
ORDER BY name;
```



Script Output x Query Result x

SQL | All Rows Fetched: 4 in 0.004 sec

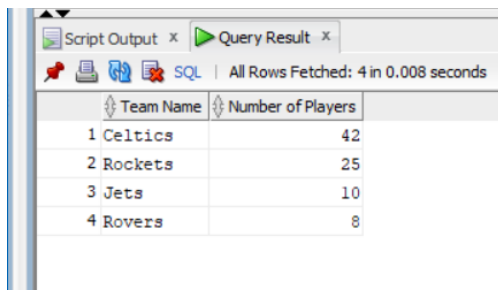
	Team Name	Number of Players
1	Celtics	42
2	Jets	10
3	Rockets	25
4	Rovers	8

PART 2

```
SELECT name AS "Team Name", number_of_players AS "Number of Players"
```

```
FROM teams
```

```
ORDER BY number_of_players DESC;
```



Script Output x Query Result x

SQL | All Rows Fetched: 4 in 0.008 seconds

	Team Name	Number of Players
1	Celtics	42
2	Rockets	25
3	Jets	10
4	Rovers	8

PART 6

Part 1 :

TOP-N-ANALYSIS (S6L8 Objective 3) 1. The customers are numbered sequentially with each new customer being assigned a higher customer number. Use TOP-N-ANALYSIS to only show the First and last name of the first three customers. Show the customers first and last name in the same column using Customer Name as the column alias.

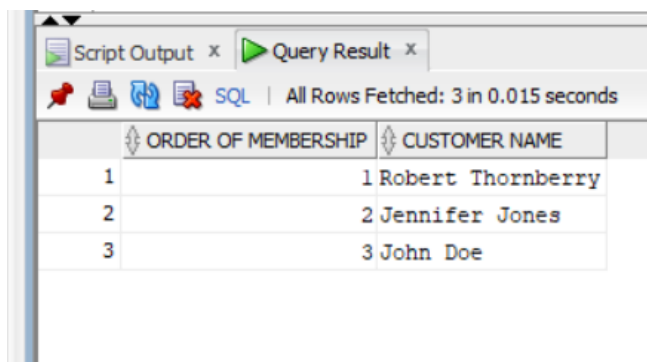
```
SELECT ROWNUM AS "ORDER OF MEMBERSHIP", FIRST_NAME || ' ' || LAST_NAME AS "CUSTOMER NAME"
```

```
FROM (SELECT FIRST_NAME, LAST_NAME
```

```
FROM CUSTOMERS
```

```
ORDER BY CTR_NUMBER)
```

```
WHERE ROWNUM <= 3
```



The screenshot shows a SQL query result window with two tabs: "Script Output" and "Query Result". The "Query Result" tab is active, displaying the results of the query. The window title bar includes icons for a pin, print, refresh, and error, along with the text "SQL | All Rows Fetched: 3 in 0.015 seconds". The results are presented in a table with two columns: "ORDER OF MEMBERSHIP" and "CUSTOMER NAME". The table contains three rows of data.

ORDER OF MEMBERSHIP	CUSTOMER NAME
1	1 Robert Thornberry
2	2 Jennifer Jones
3	3 John Doe

Part 2 :

Using a Substitution Variable (S6L8 Objective 4) 1. Use a substitution variable that will allow you to enter the commission rate for the sales representatives. The first and last names should be displayed to screen for any sales representatives that earn that commission rate and the output should be ordered by their last name. Use an appropriate alias for your column headings.

```
SELECT FIRST_NAME || ' ' || LAST_NAME AS "SALE REPRESENTATIVES"  
FROM SALES_REPRESENTATIVES  
WHERE COMMISSION_RATE=:COMMISSION_RATE  
ORDER BY LAST_NAME
```

