

SQL 3 - DML 2

HAND-WRITTEN

SQL 3 - DML 2

Part 1

Exercise 1

Question 1

1. SELECT * FROM CUSTOMERS
2. SELECT * FROM TEAMS
3. SELECT * FROM ITEMS

Question 2

1. SELECT CTR-NUMBER, FIRST-NAME, LAST-NAME, EMAIL, PHONE-NUMBER
FROM CUSTOMERS
2. SELECT NAME, NUMBER-OF-PLAYERS FROM TEAMS
3. SELECT NAME, DESCRIPTION, CATEGORY FROM ITEMS

Part 2

Question 1

1. SELECT FIRST-NAME, LAST-NAME, CURRENT-BALANCE, CURRENT-BALANCE / 12.00 AS
MONTHLY-PAYMENT FROM CUSTOMERS
2. SELECT ~~first-name~~, last-name, phone-number, current-balance,
~~current-balance - 5.00~~ AS ~~balance-after-gift~~
FROM CUSTOMERS
3. May lead to negative values or values with zero for ~~balance-after-gift~~
column. If current balance is less than five, subtracting it with 5
will result in negative and if current balance is 5 it will
result in zero.

Question 2

1. SELECT first-name ~~as~~ "First Name", last-name ~~as~~ "Last Name",
current-balance ~~as~~ "Balance", current-balance / 12 "Monthly repayments"
FROM CUSTOMERS

Question 3

1. SELECT 'The' || name || 'has' || number-of-players || 'players and receives a'
discount of '|| discount ||' percent' AS "Team Information" FROM TEAMS
2. The value in the discount column for the fast team is NULL

Part 3

Question 1

1. SELECT * FROM customers
WHERE Ctr-number = 'C01986'
2. SELECT first-name AS "First Name", last-name AS "Last Name",
Ctr-number AS "Customer Number" FROM customers
WHERE current-balance > 100
3. SELECT ID AS "Order ID", odr-date AS "Date", odr-time AS "Time"
FROM orders
WHERE odr-date < '29-May-2019'

Question 2

1. SELECT ID AS "Inventory ID", cost AS "Cost", units AS "Units"
FROM inventory-list
WHERE cost BETWEEN 3.00 AND 15.00

Question 3

1. SELECT ID AS "Inventory ID", cost AS "Cost", units AS "Units" FROM inventory-list
WHERE units IN (50, 100, 150, 200)

Question 4

1. SELECT ID AS "Inventory ID", cost AS "Cost", units AS "Units" FROM inventory-list
WHERE units NOT IN (50, 100, 150, 200)

Question 5

1. SELECT item-number AS ~~Item Number~~ "Item Number", name AS "Name"
FROM items
WHERE name LIKE '%gol%'

Question 6

1. SELECT item-number AS "Item Number", name AS "Name" FROM items
WHERE NAME LIKE '%lo%'

Part 4

Question 1

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" WHERE discount IS NOT NULL

Question 2

1. 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'

Question 3

1. 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'

Question 4

1. SELECT ctr-number AS "Customer Number", address-line-1 AS "Street Address", zip-code AS "Postal Code" FROM customers_address WHERE city <> Liverpool

Part 5

Question 1

1. SELECT name AS "Team Name", number_of_players AS "Number of Players" FROM teams ORDER BY name
2. SELECT name AS "Team Name", number_of_players AS "Number of Players" FROM teams ORDER BY number_of_players DESC
3. SELECT name AS "Team Name", number_of_players AS "Players" FROM teams ORDER BY "Team Name" DESC

Part 6

Question 1

1. SELECT rownum, first_name || ' ' || last_name AS "Customer Name"
FROM (SELECT ~~first_name, last_name, ctr_number~~ FROM customers
ORDER BY ctr_number)
WHERE rownum <= 3

Question 2

1. SELECT
first_name AS "First Name",
last_name AS "Last Name",
sales_representative
FROM (SELECT commission_rate, first_name, last_name FROM ~~sales~~
ORDER BY last_name)
~~WHERE commission_rate = :commission_rate~~

OUTPUT FROM ORACLE DB

Part 1

Question 1

1. SELECT * FROM CUSTOMERS

The screenshot shows the Oracle SQL Developer interface. The top navigation bar has tabs for 'DML11.sql', 'Welcome Page', and 'DML1'. The main area is titled 'Worksheet' and contains the SQL statement: 'SELECT * FROM CUSTOMERS'. Below the statement is a large yellow-highlighted area where the results will be displayed. The 'Query Result' tab is selected, showing the output of the query. The output table has the following columns: CTR_NUMBER, EMAIL, FIRST_NAME, LAST_NAME, PHONE_NUMBER, CURRENT_BALANCE, SRE_ID, TEM_ID, and LOYALTY_CARD_NUMBER. The data rows are:

CTR_NUMBER	EMAIL	FIRST_NAME	LAST_NAME	PHONE_NUMBER	CURRENT_BALANCE	SRE_ID	TEM_ID	LOYALTY_CARD_NUMBER
c00001	bob.thornberry@heatmail.com	Robert	Thornberry	01234567898	150	sr01	t001	(null)
c00012	Jjones@freemail.com	Jennifer	Jones	01505214598	0	(null)	(null)	lc1015
c00101	unknown@here.com	John	Doe	03216547808	987.5	sr01	t002	(null)
c00103	MurciaA@globaltech.com	Andrew	Murcia	07715246890	85	(null)	(null)	lc2341
c01986	margal8@delphiview.com	Maria	Galant	01442736589	125.65	sr03	t003	(null)
c02001	brianrog@hootech.com	Brian	Rogers	01654564898	50	(null)	(null)	lc4587

Below the results, the 'Messages - Log' section shows the message: 'All Rows Fetched: 6 in 0.005 seconds'. The status bar at the bottom right indicates 'Line 3 Column 1 | Insert | Modified | Windows: C'.

2. SELECT * FROM TEAMS

The screenshot shows the Oracle SQL Developer interface. The top navigation bar has tabs for 'DML11.sql', 'Welcome Page', and 'DML1'. The main area is titled 'Worksheet' and contains the SQL statement: 'SELECT * FROM TEAMS'. Below the statement is a large yellow-highlighted area where the results will be displayed. The 'Query Result' tab is selected, showing the output of the query. The output table has the following columns: ID, NAME, NUMBER_OF_PLAYERS, and DISCOUNT. The data rows are:

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

Below the results, the 'Messages - Log' section shows the message: 'All Rows Fetched: 4 in 0.006 seconds'. The status bar at the bottom right indicates 'Line 1 Column 20 | Insert | Modified | Windows: C'.

3. SELECT * FROM ITEMS

The screenshot shows the Oracle SQL Developer interface. In the top navigation bar, there are tabs for 'DML11.sql', 'Welcome Page', and 'DML1'. Below the tabs, the 'Worksheet' tab is selected, showing the SQL command: 'SELECT * FROM ITEMS'. In the 'Query Result' tab, the output is displayed as a table:

ITEM_NUMBER	NAME	DESCRIPTION	CATEGORY	COLOR	Size	ILT_ID
1 im01101044	gloves	catcher mitt	clothing	brown	m	i1010230124
2 im01101045	under shirt	top worn under the game top	clothing	white	s	i1010230125
3 im01101046	socks	team socks with emblem	clothing	range	l	i1010230126
4 im01101047	game top	team shirt with emblem	clothing	range	m	i1010230127
5 im01101048	premium bat	high quality baseball bat	equipment	(null)	(null)	i1010230128

Below the table, the 'Messages - Log' pane shows the message: 'All Rows Fetched: 5 in 0.006 seconds'. The status bar at the bottom indicates 'Line 1 Column 20 | Insert | Modified | Windows: C'.

Question 2

1. SELECT CTR_NUMBER, FIRST_NAME, LAST_NAME, EMAIL, PHONE_NUMBER FROM CUSTOMERS

The screenshot shows the Oracle SQL Developer interface. The 'Worksheet' tab is selected, displaying the following multi-table query:

```

/*SELECT * FROM CUSTOMERS
SELECT * FROM TEAMS
SELECT * FROM ITEMS
*/
SELECT CTR_NUMBER, FIRST_NAME, LAST_NAME, EMAIL, PHONE_NUMBER FROM CUSTOMERS
  
```

In the 'Query Result' tab, the output is displayed as a table:

CTR_NUMBER	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER
c00001	Robert	Thornberry	bob.thornberry@heatmail.com	01234567890
c00012	Jennifer	Jones	Jjones@fremail.com	01505214598
c00101	John	Doe	unknown@here.com	03216547808
c00103	Andrea	Murcia	Murcia@globaltech.com	07715246890
c01986	Maria	Galant	margal87@delphiview.com	01442736589
c02001	Brian	Rogers	brianrog@hootech.com	01654564898

Below the table, the 'Messages - Log' pane shows the message: 'All Rows Fetched: 6 in 0.006 seconds'. The status bar at the bottom indicates 'Line 8 Column 77 | Insert | Modified | Windows: C'.

2. SELECT NAME, NUMBER_OF_PLAYERS FROM TEAMS

The screenshot shows the Oracle SQL Developer interface. The 'Connections' sidebar lists several schemas, including 'TEAMS'. The 'Worksheet' tab contains the following SQL code:

```
/*SELECT * FROM CUSTOMERS
SELECT * FROM TEAMS
SELECT * FROM ITEMS
SELECT CTR_NUMBER, FIRST_NAME, LAST_NAME, EMAIL, PHONE_NUMBER FROM CUSTOMERS
*/
SELECT NAME, NUMBER_OF_PLAYERS FROM TEAMS
```

The 'Query Result' tab displays the output:

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

Messages - Log

3. SELECT NAME, DESCRIPTION, CATEGORY FROM ITEMS

The screenshot shows the Oracle SQL Developer interface. The 'Connections' sidebar lists various schemas, including 'ITEMS'. The 'Worksheet' tab contains the following SQL code:

```
/*SELECT * FROM CUSTOMERS
SELECT * FROM TEAMS
SELECT * FROM ITEMS
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
```

The 'Query Result' tab displays the output:

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

Messages - Log

Part 2

Question 1

- ```
1. SELECT FIRST_NAME, LAST_NAME, CURRENT_BALANCE, CURRENT_BALANCE / 12.00 AS
monthly_payment
FROM CUSTOMERS
```

- ```
2. SELECT FIRST_NAME, LAST_NAME, PHONE_NUMBER, CURRENT_BALANCE,  
       (CURRENT_BALANCE - 5.00) AS balance_after_gift  
   FROM CUSTOMERS
```

The screenshot shows the Oracle SQL Developer interface. The top window is titled 'DML11.sql' and contains a query in the 'Worksheet' tab:

```
SELECT FIRST_NAME, LAST_NAME, PHONE_NUMBER, CURRENT_BALANCE, (CURRENT_BALANCE - 5.00) AS balance_after_gift
FROM CUSTOMERS;
```

The bottom window is titled 'Query Result' and displays the results of the query:

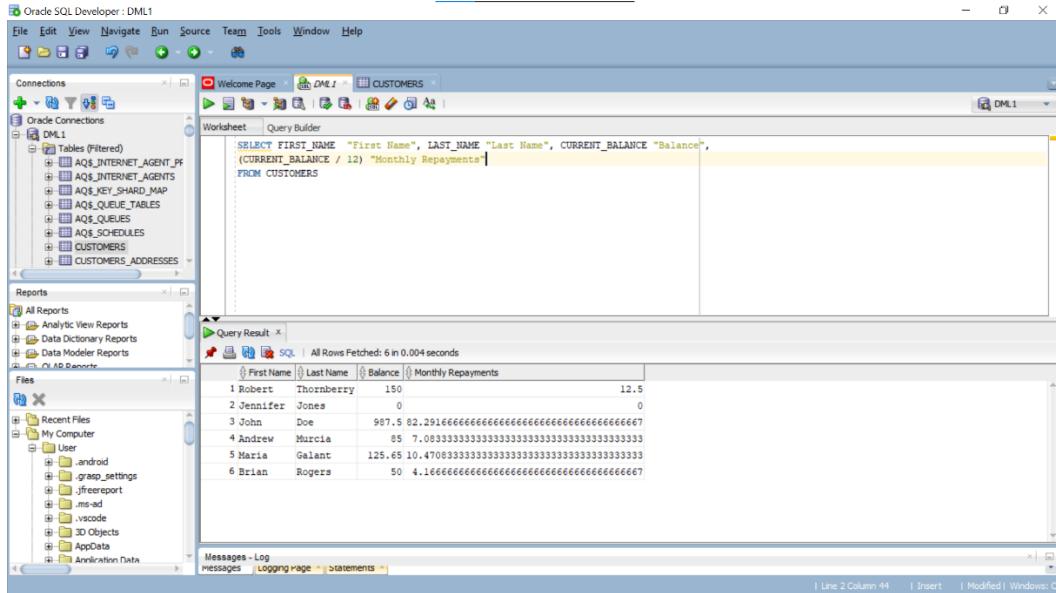
	FIRST_NAME	LAST_NAME	PHONE_NUMBER	CURRENT_BALANCE	BALANCE_AFTER_GIFT
1	Robert	Thornberry	01234567898	150	145
2	Jennifer	Jones	01505214598	0	-5
3	John	Doe	03216547808	987.5	982.5
4	Andrew	Murcia	07715246890	85	80
5	Maria	Galant	01442736589	125.65	120.65
6	Brian	Rogers	01654564898	50	45

3. May lead to negative values or values of 0 for balance_after_gift column. if current balance is 5, subtracting 5 will result in 0 and if current balance is less than 5 it will result in negative

Question 2

- ```
1. SELECT FIRST_NAME "First Name", LAST_NAME "Last Name", CURRENT_BALANCE
 "Balance",
 (CURRENT_BALANCE / 12) "Monthly Repayments"
 FROM CUSTOMERS
```

## FROM CUSTOMERS

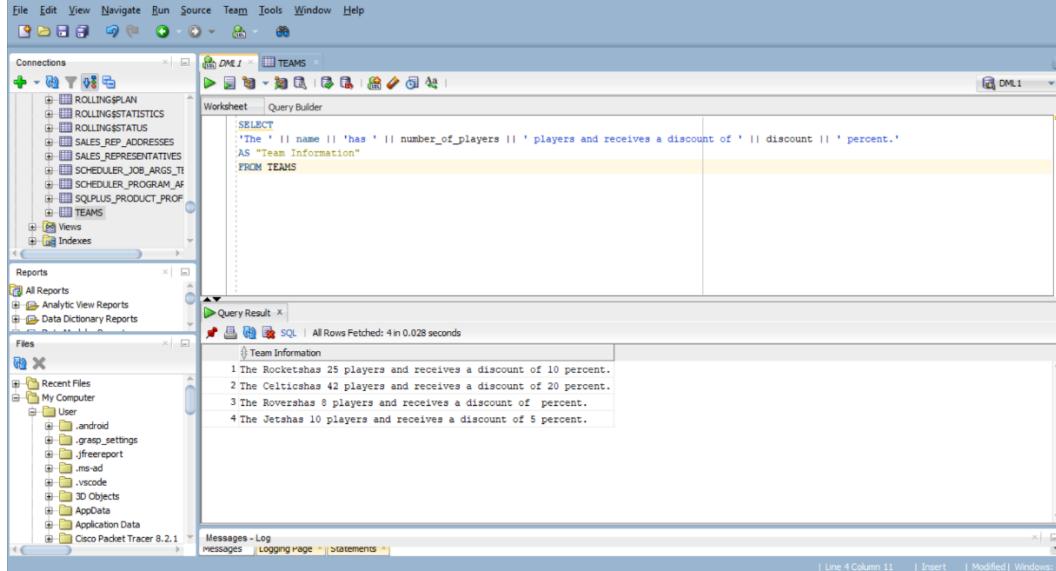


### Question 3

- ```
1. SELECT
   'The ' || name || ' has ' || number_of_players || ' players and receives a discount of ' ||
   discount || ' percent.'
   AS "Team Information"
   FROM TEAMS
```

FROM TEAMS

Oracle SQL Developer : DML1



2. The value in the discount column for the last team is NULL

Part 3

Question 1

1. SELECT * FROM CUSTOMERS

WHERE CTR_NUMBER = 'c01986'

```
SELECT * FROM CUSTOMERS
WHERE CTR_NUMBER = 'c01986'
```

CTR_NUMBER	EMAIL	FIRST_NAME	LAST_NAME	PHONE_NUMBER	CURRENT_BALANCE	SRE_ID	TEM_ID	LOYALTY_CARD_NUMBER
c01986	margal87@delphiview.com	Maria	Galant	(044)2736559	125.65	sr03	t003	(null)

2. SELECT FIRST_NAME AS "First Name", LAST_NAME AS "Last Name", CTR_NUMBER AS "Customer Number"

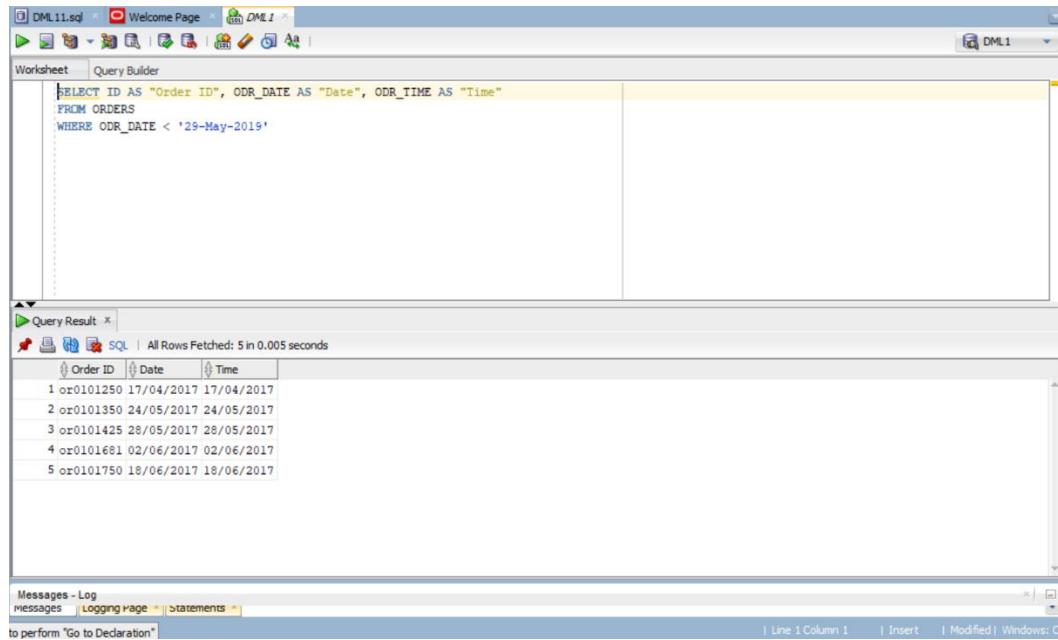
FROM CUSTOMERS

WHERE CURRENT_BALANCE > 100

```
SELECT FIRST_NAME AS "First Name", LAST_NAME AS "Last Name", CTR_NUMBER AS "Customer Number"
FROM CUSTOMERS
WHERE CURRENT_BALANCE > 100
```

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 "Date", ODR_TIME AS "Time"
 FROM ORDERS
 WHERE ODR_DATE < '29-May-2019'



The screenshot shows the Oracle SQL Developer interface with a query editor window titled 'DML1' containing the following SQL code:

```
SELECT ID AS "Order ID", ODR_DATE AS "Date", ODR_TIME AS "Time"
FROM ORDERS
WHERE ODR_DATE < '29-May-2019'
```

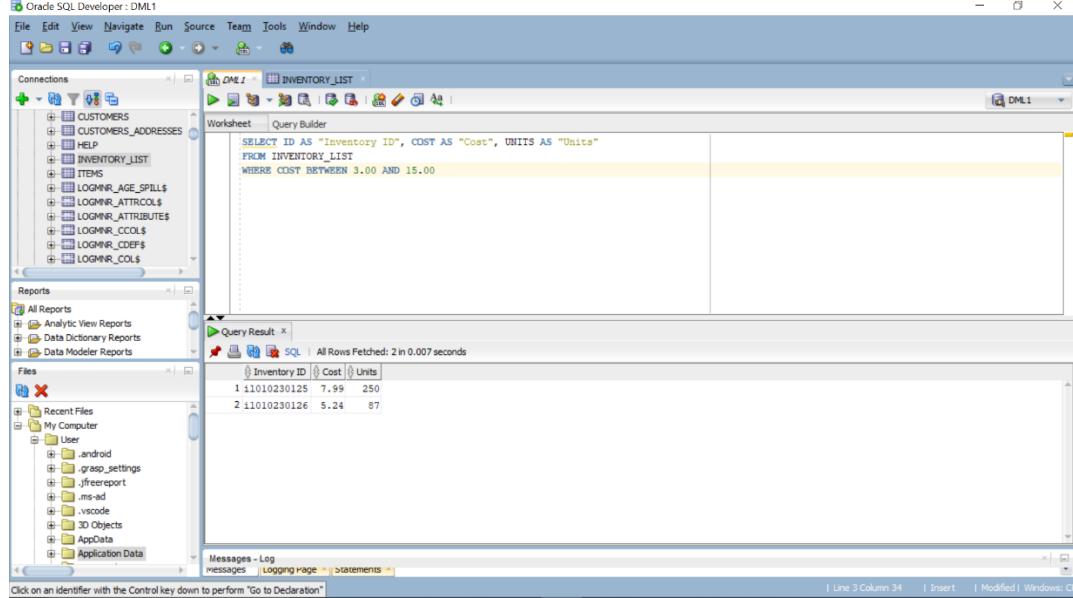
Below the code, the 'Query Result' tab displays the fetched data:

Order ID	Date	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

Question 2

1. SELECT ID AS "Inventory ID", COST AS "Cost", UNITS AS "Units"
 FROM INVENTORY_LIST

WHERE COST BETWEEN 3.00 AND 15.00



The screenshot shows the Oracle SQL Developer interface with a query editor window titled 'DML1' containing the following SQL code:

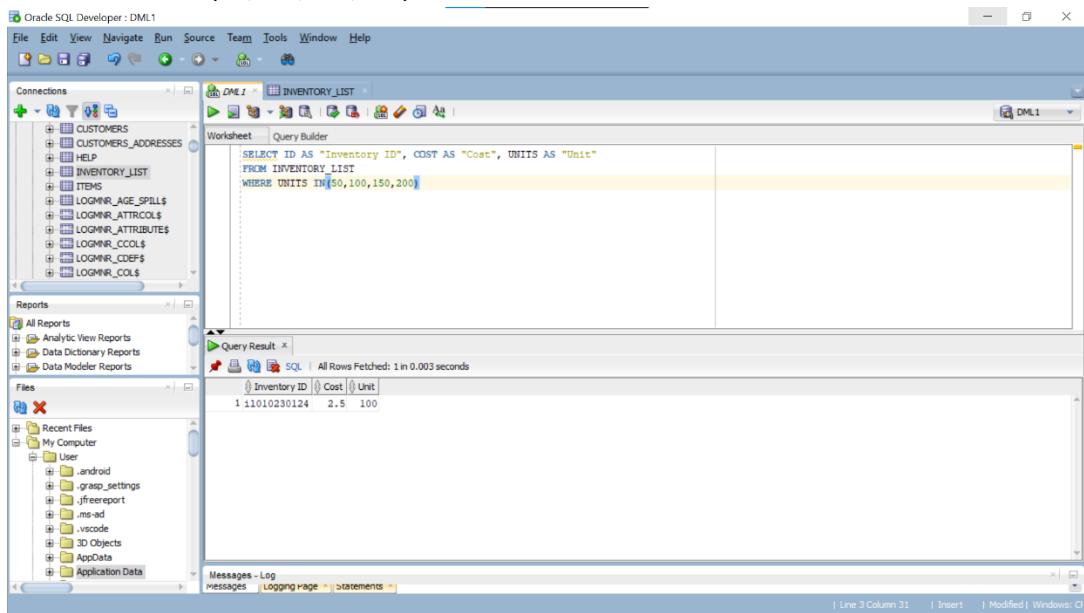
```
SELECT ID AS "Inventory ID", COST AS "Cost", UNITS AS "Units"
FROM INVENTORY_LIST
WHERE COST BETWEEN 3.00 AND 15.00
```

Below the code, the 'Query Result' tab displays the fetched data:

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

Question 3

1. `SELECT ID AS "Inventory ID", COST AS "Cost", UNITS AS "Unit"
FROM INVENTORY_LIST
WHERE UNITS IN(50,100,150,200)`



The screenshot shows the Oracle SQL Developer interface. The 'Worksheet' tab contains the SQL query:

```
SELECT ID AS "Inventory ID", COST AS "Cost", UNITS AS "Unit"  
FROM INVENTORY_LIST  
WHERE UNITS IN(50,100,150,200)
```

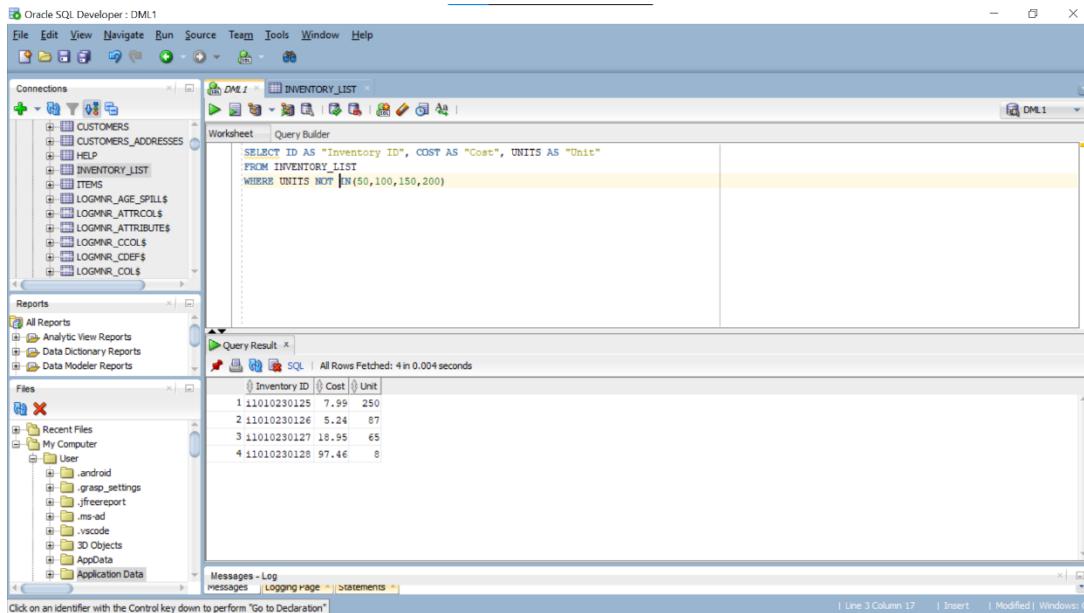
The 'Query Result' tab displays the output:

Inventory ID	Cost	Unit
11010230124	2.5	100

Messages - Log

Question 4

1. `SELECT ID AS "Inventory ID", COST AS "Cost", UNITS AS "Unit"
FROM INVENTORY_LIST
WHERE UNITS NOT IN(50,100,150,200)`



The screenshot shows the Oracle SQL Developer interface. The 'Worksheet' tab contains the SQL query:

```
SELECT ID AS "Inventory ID", COST AS "Cost", UNITS AS "Unit"  
FROM INVENTORY_LIST  
WHERE UNITS NOT IN(50,100,150,200)
```

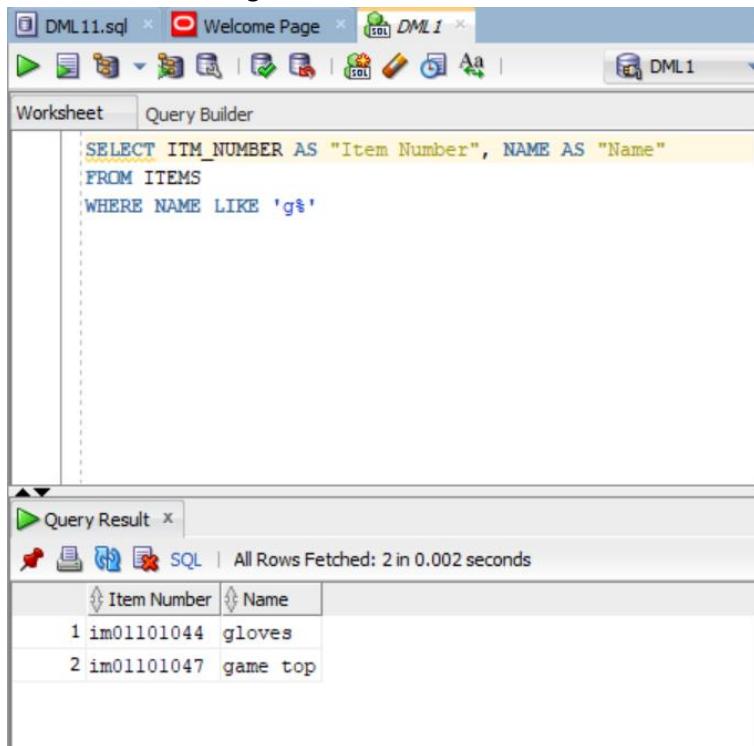
The 'Query Result' tab displays the output:

Inventory ID	Cost	Unit
1 11010230125	7.99	250
2 11010230126	5.24	87
3 11010230127	18.95	65
4 11010230128	97.46	8

Messages - Log

Question 5

1. SELECT ITM_NUMBER AS "Item Number", NAME AS "Name"
FROM ITEMS
WHERE NAME LIKE 'g%'

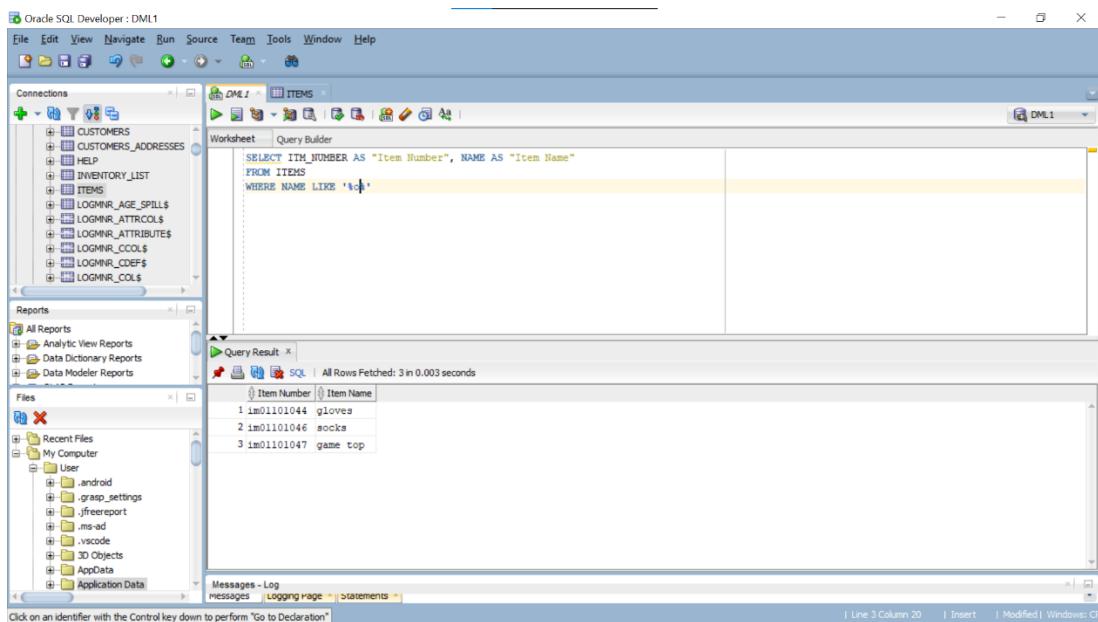


The screenshot shows the Oracle SQL Developer interface. The top navigation bar has tabs for 'DML11.sql', 'Welcome Page', and 'DML 1'. Below the tabs is a toolbar with various icons. The main area is divided into two panes: 'Worksheet' and 'Query Builder'. The 'Worksheet' pane contains the SQL query: 'SELECT ITM_NUMBER AS "Item Number", NAME AS "Name" FROM ITEMS WHERE NAME LIKE 'g%''. The 'Query Result' pane below it displays the results of the query, which are:

Item Number	Name
1 im01101044	gloves
2 im01101047	game top

Question 6

1. SELECT ITM_NUMBER AS "Item Number", NAME AS "Item Name"
FROM ITEMS
WHERE NAME LIKE '%o%'



The screenshot shows the Oracle SQL Developer interface. The top navigation bar has tabs for 'File', 'Edit', 'View', 'Navigate', 'Run', 'Source', 'Team', 'Tools', 'Window', and 'Help'. Below the tabs is a toolbar with various icons. The main area is divided into three panes: 'Connections', 'Worksheet', and 'Query Result'. The 'Connections' pane shows a list of database objects like 'ITEMS', 'ITEMS_ATTRIBUTES\$', etc. The 'Worksheet' pane contains the SQL query: 'SELECT ITM_NUMBER AS "Item Number", NAME AS "Item Name" FROM ITEMS WHERE NAME LIKE '%o%'''. The 'Query Result' pane below it displays the results of the query, which are:

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

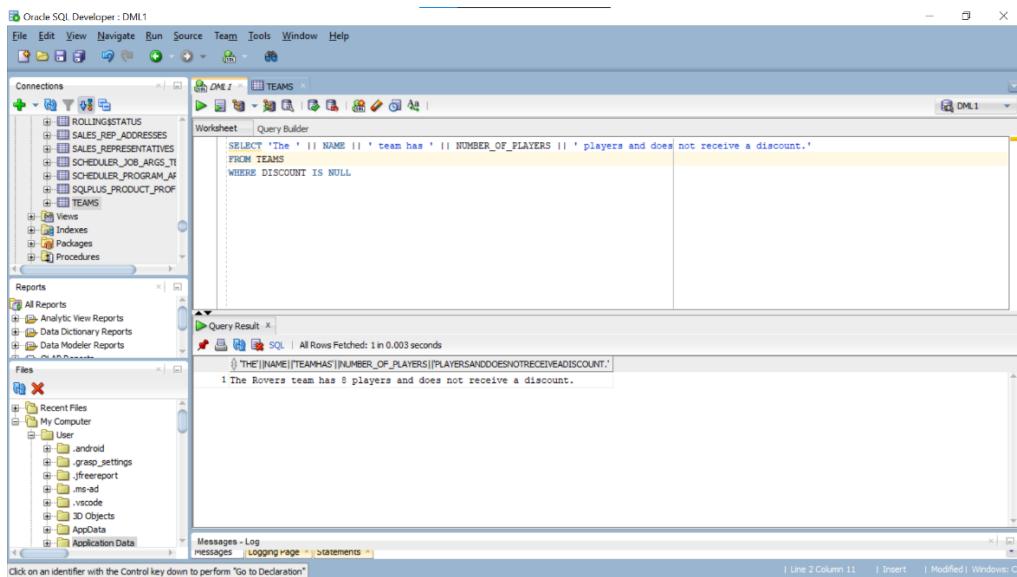
Part 4

Question 1

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



The screenshot shows the Oracle SQL Developer interface with the following details:

- File Bar:** File, Edit, View, Navigate, Run, Source, Team, Tools, Window, Help.
- Connections:** DML1 is selected.
- Worksheet:** Contains the SQL query:

```
SELECT 'The ' || NAME || ' team has ' || NUMBER_OF_PLAYERS || ' players and does not receive a discount.'  
FROM TEAMS  
WHERE DISCOUNT IS NULL
```
- Query Result:** Shows the output:

```
THE|NAME||TEAMHAS||NUMBER_OF_PLAYERS||PLAYERSANDDOESNOTRECEIVEADISCOUNT.
```

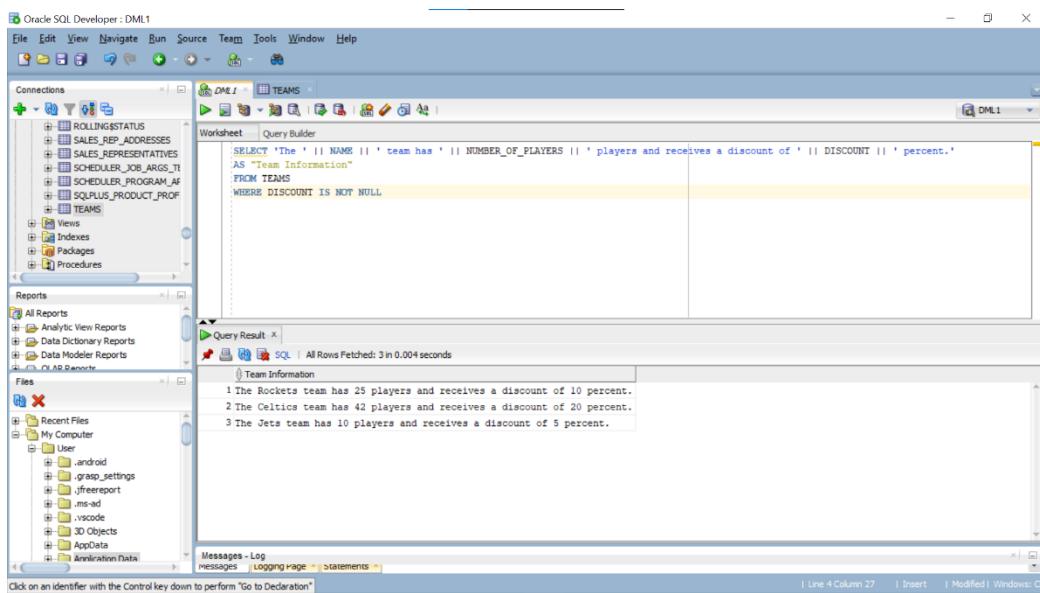
1 The Rovers team has 8 players and does not receive a discount.
- Messages - Log:** Displays the log message: "1 Row Fetched: 1 in 0.003 seconds".
- Bottom Status Bar:** Line 2 Column 11, Insert, Modified, Windows.

2. 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



The screenshot shows the Oracle SQL Developer interface with the following details:

- File Bar:** File, Edit, View, Navigate, Run, Source, Team, Tools, Window, Help.
- Connections:** DML1 is selected.
- Worksheet:** Contains the SQL query:

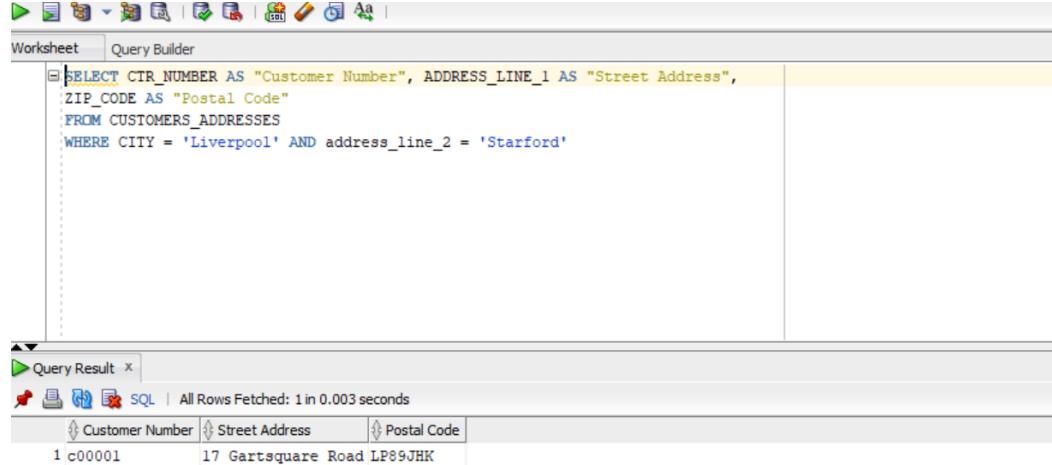
```
SELECT 'The ' || NAME || ' team has ' || NUMBER_OF_PLAYERS || ' players and receives a discount of ' || DISCOUNT || ' percent.'  
AS "Team Information"  
FROM TEAMS  
WHERE DISCOUNT IS NOT NULL
```
- Query Result:** Shows the output:

```
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.
```
- Messages - Log:** Displays the log message: "3 Rows Fetched: 3 in 0.004 seconds".
- Bottom Status Bar:** Line 4 Column 27, Insert, Modified, Windows.

Question 2

1.

```
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'
```



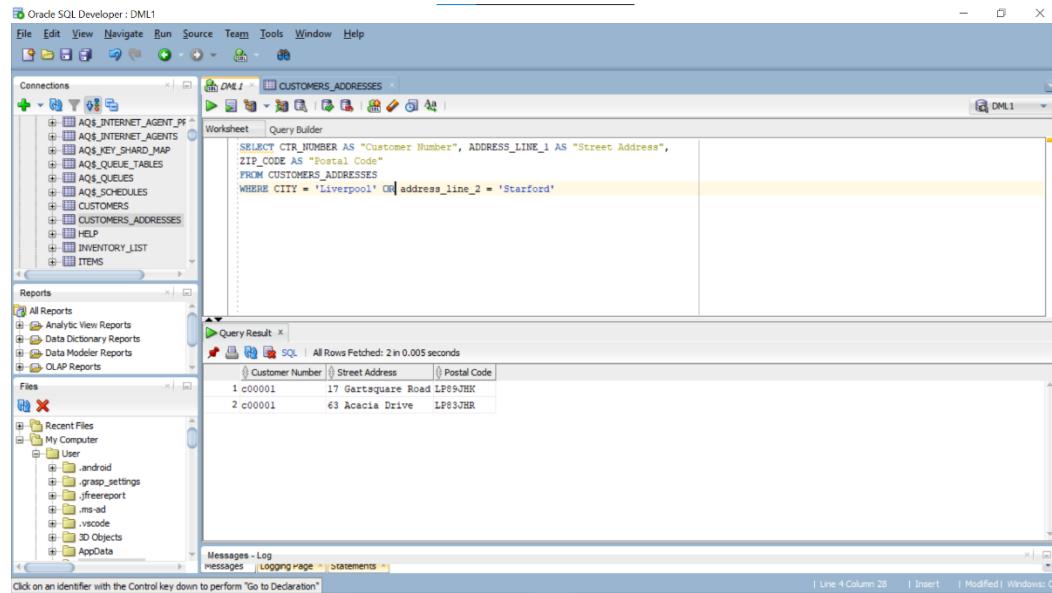
The screenshot shows the Oracle SQL Developer interface. The 'Worksheet' tab is active, displaying the SQL query. The 'Query Result' tab shows the execution results in a grid format.

Customer Number	Street Address	Postal Code
1 c00001	17 Gartsquare Road	LP89JHK

Question 3

1.

```
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'
```



The screenshot shows the Oracle SQL Developer interface. The 'Worksheet' tab is active, displaying the SQL query. The 'Query Result' tab shows the execution results in a grid format.

Customer Number	Street Address	Postal Code
1 c00001	17 Gartsquare Road	LP89JHK
2 c00001	63 Acacia Drive	LP83JHR

Question 4

1.

```
SELECT CTR_NUMBER AS "Customer Number", ADDRESS_LINE_1 AS "Street Address",
ZIP_CODE AS "Postal Code"
FROM CUSTOMERS_ADDRESSES
WHERE CITY <> 'Liverpool'
```

The screenshot shows the Oracle SQL Developer interface. The 'Worksheet' tab contains the SQL query:

```
SELECT CTR_NUMBER AS "Customer Number", ADDRESS_LINE_1 AS "Street Address",
ZIP_CODE AS "Postal Code"
FROM CUSTOMERS_ADDRESSES
WHERE CITY <> 'Liverpool'
```

The 'Query Result' tab displays the output:

Customer Number	Street Address	Postal Code
1 c00101	54 Ropewalk Crescent ST145AGV	
2 c01986	36 Watercress Lane	JP23YIH

Part 5

Question 1

1.

```
SELECT NAME AS "Team Name", NUMBER_OF_PLAYERS AS "Number of Players"
FROM TEAMS
ORDER BY NAME
```

The screenshot shows the Oracle SQL Developer interface. The 'Worksheet' tab contains the SQL query:

```
SELECT NAME AS "Team Name", NUMBER_OF_PLAYERS AS "Number of Players"
FROM TEAMS
ORDER BY NAME
```

The 'Query Result' tab displays the output:

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

Question 2

1.

```
SELECT NAME AS "Team Name", NUMBER_OF_PLAYERS AS "Number of Players"
FROM TEAMS
ORDER BY NUMBER_OF_PLAYERS DESC
```

The screenshot shows the Oracle SQL Developer interface. The 'Worksheet' tab contains the SQL query from Question 2. The 'Query Result' tab displays the output:

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

Question 3

1.

```
SELECT NAME AS "Team Name", NUMBER_OF_PLAYERS AS "Players"
FROM TEAMS
ORDER BY "Team Name" DESC
```

The screenshot shows the Oracle SQL Developer interface. The 'Worksheet' tab contains the SQL query from Question 3. The 'Query Result' tab displays the output:

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

Part 6

Question 1

- ```
1. SELECT ROWNUM, first_name || ' ' || last_name AS "Customer Name"
 FROM (SELECT first_name, last_name, ctr_number
 FROM CUSTOMERS
 ORDER BY ctr_number)
 WHERE ROWNUM <=3
```

The screenshot shows the Oracle SQL Developer interface. The top menu bar includes File, Edit, View, Navigate, Run, Source, Team, Tools, Window, and Help. The left sidebar contains sections for Connections (with a tree view of schemas like AQ\$KEY\_SHARD\_MAP, AQ\$QUEUE\_TABLES, AQ\$QUEUES, AQ\$SCHEDULES, CUSTOMERS, CUSTOMERS\_ADDRESSES, HELP, INVENTORY\_LIST, ITEMS, LOGMNR\_LOGFILE\$, and LOGMNR\_ATTRIBUTE\$), Reports (All Reports, Analytic View Reports, Data Dictionary Reports, Data Modeler Reports, OLAP Reports, and TimesTen Reports), and Files (Recent Files, My Computer, User, and a folder for .android). The main workspace has tabs for DML1 and CUSTOMERS. The DML1 tab shows a query builder with the following SQL code:

```
SELECT ROWNUM, first_name || ' ' || last_name AS "Customer Name"
FROM (SELECT first_name, last_name, ctr_number
 FROM CUSTOMERS
 ORDER BY ctr_number)
 WHERE ROWNUM <= 3
```

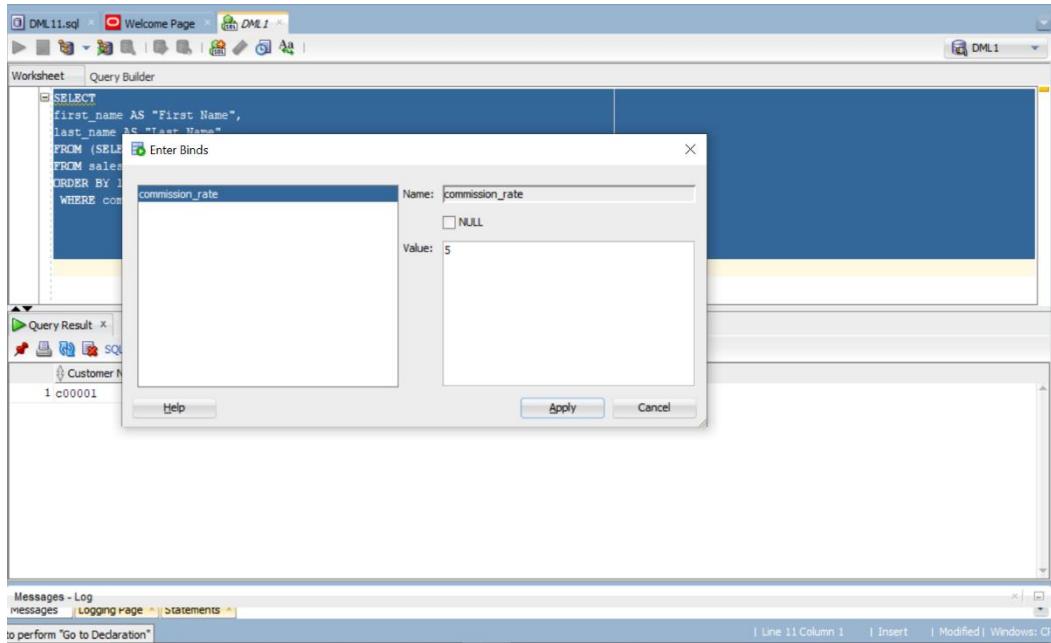
The results pane displays the output of the query:

| RowNum | Customer Name     |
|--------|-------------------|
| 1      | Robert Thornberry |
| 2      | Jennifer Jones    |
| 3      | John Doe          |

At the bottom, there is a messages log tab with tabs for Messages, Logging Page, and Statements. A status bar at the bottom right indicates "Line 6 Column 1 Insert Modified Windows C".

## Question 2

```
SELECT
first_name AS "First Name",
last_name AS "Last Name"
FROM (SELECT commission_rate, first_name, last_name
 FROM sales_representatives
 ORDER BY last_name)
 WHERE commission_rate = :commission_rate
```



After putting 5 on commission\_rate;

