

Lab 3

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SQL3-DML2 PART 1

Section 6 Lesson 6 Exercise 1: Retrieving Data Using SELECT

Write and Execute SELECT statements (S6L6 Objective 2)

In this exercise you will retrieve data that is stored in the database system by using a SELECT statement.

Part 1: Retrieving all columns from a table.

Using the SELECT * statement show all data stored in the following tables:

1. customers

The screenshot shows the Oracle APEX SQL Workshop interface. The top navigation bar includes 'APEX', 'App Builder', 'SQL Workshop', 'Team Development', and 'Gallery'. A search bar and user profile 'Lim Bo Yuan boyuan' are on the right. The 'SQL Commands' section shows the schema 'WKSP_BOYUAN'. The 'Language' is set to 'SQL' and 'Rows' to '10'. The SQL command entered is 'SELECT * FROM customers;'. The 'Results' tab is active, displaying a table with 9 columns: CTR_NUMBER, EMAIL, FIRST_NAME, LAST_NAME, PHONE_NUMBER, CURRENT_BALANCE, SRE_ID, TEM_ID, and LOYALTY_CARD_NUMB. The table contains 6 rows of data. At the bottom, it states '6 rows returned in 0.02 seconds' with a 'Download' button.

CTR_NUMBER	EMAIL	FIRST_NAME	LAST_NAME	PHONE_NUMBER	CURRENT_BALANCE	SRE_ID	TEM_ID	LOYALTY_CARD_NUMB
c00001	bob.thornberry@heatmail.com	Robert	Thornberry	01234567898	150	sr01	t001	-
c00012	Jjones@freemail.com	Jennifer	Jones	01505214598	0	-	-	lc1015
c00101	unknown@here.com	John	Doe	03216547808	987.5	sr01	t002	-
c00103	MurciaA@globaltech.com	Andrew	Murcia	07715246890	85	-	-	lc2341
c01986	margal87@delphiview.com	Maria	Galant	01442736589	125.65	sr03	t003	-
c02001	brianrog@hootech.com	Brian	Rogers	01654564898	50	-	-	lc4587

2. teams

APEX App Builder SQL Workshop Team Development Gallery Search

Schema WKSP_BOYUAN

Language SQL Rows 10 Clear Command Find Tables Save Run

```
1 SELECT *
2 FROM teams;
```

Results Explain Describe Saved SQL History

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

4 rows returned in 0.01 seconds Download

3. items

APEX App Builder SQL Workshop Team Development Gallery Search

Schema WKSP_BOYUAN

Language SQL Rows 10 Clear Command Find Tables Save Run

```
1 SELECT *
2 FROM items;
```

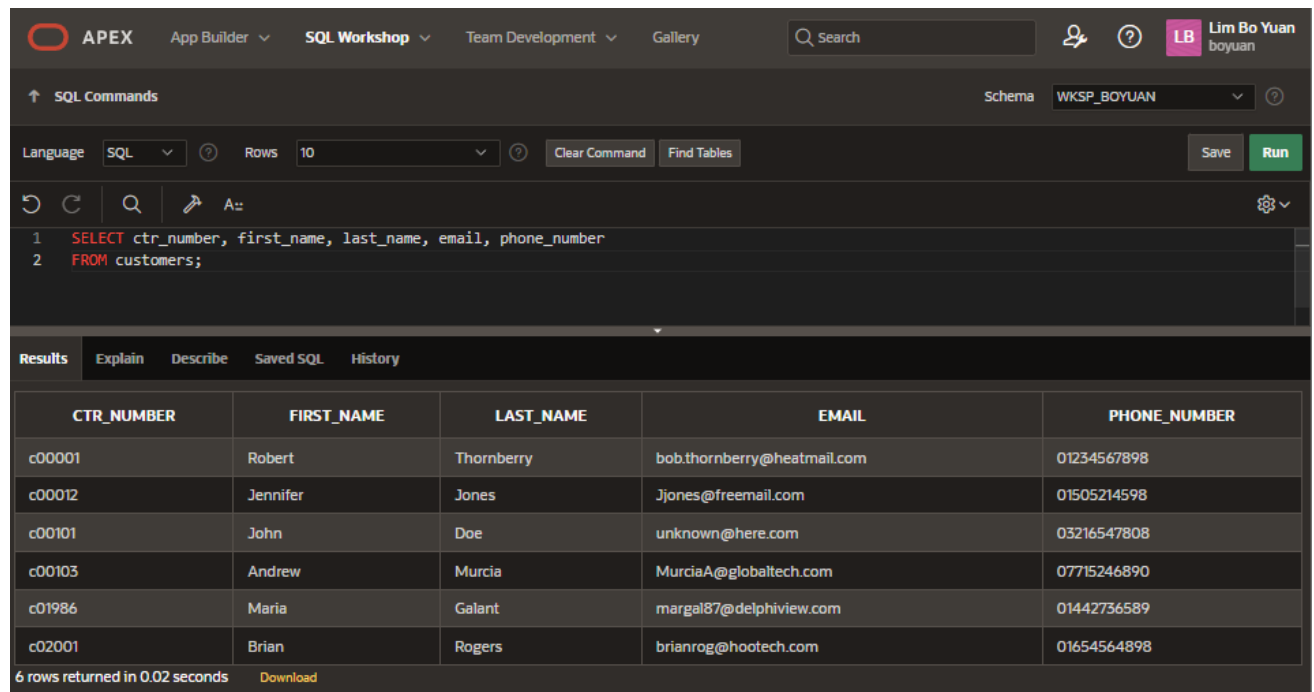
Results Explain Describe Saved SQL History

ITM_NUMBER	NAME	DESCRIPTION	CATEGORY	COLOR	Size	ILT_ID
im01101044	gloves	catcher mitt	clothing	brown	m	il010230124
im01101045	under shirt	top worn under the game top	clothing	white	s	il010230125
im01101046	socks	team socks with emblem	clothing	range	l	il010230126
im01101047	game top	team shirt with emblem	clothing	range	m	il010230127
im01101048	premium bat	high quaity baseball bat	equipment	-	-	il010230128

5 rows returned in 0.01 seconds Download

Part 2: Selecting Specific Columns

1. Display the customer number, first name, last name, email and phone number of the customers.



The screenshot shows the APEX SQL Workshop interface. The top navigation bar includes 'APEX', 'App Builder', 'SQL Workshop', 'Team Development', and 'Gallery'. A search bar and user profile 'Lim Bo Yuan' are on the right. The 'SQL Commands' section shows a query:

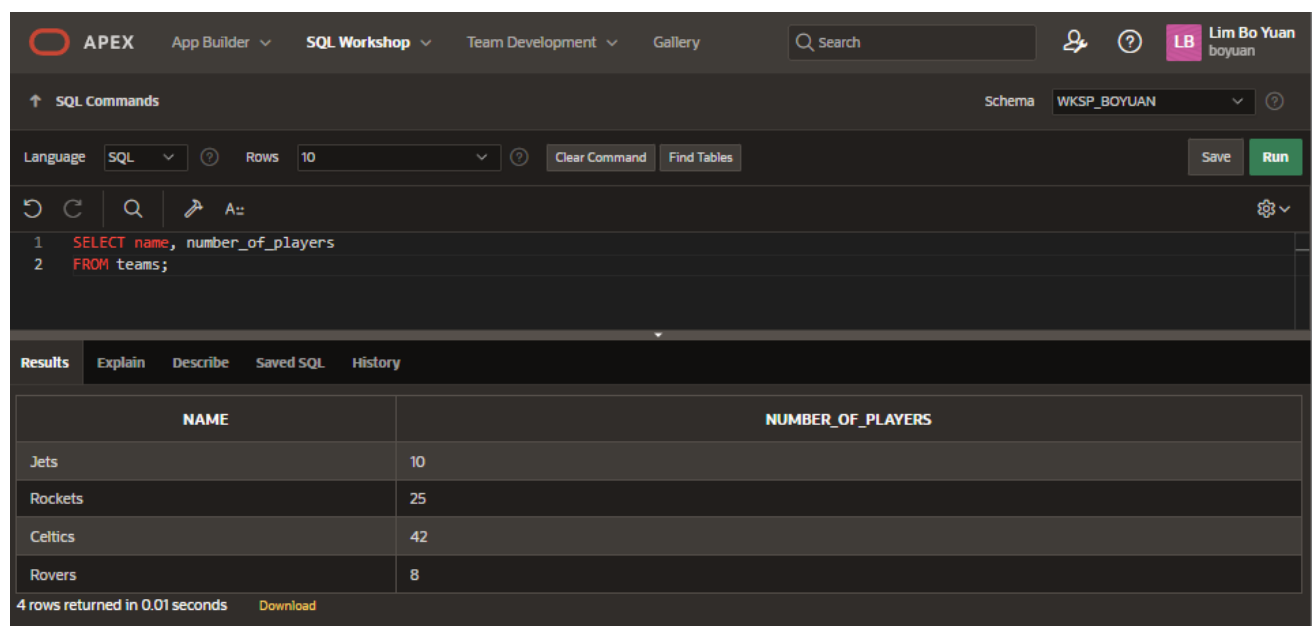
```
1 SELECT ctr_number, first_name, last_name, email, phone_number
2 FROM customers;
```

 The 'Results' tab is active, displaying a table with 6 rows. The table has columns: CTR_NUMBER, FIRST_NAME, LAST_NAME, EMAIL, and PHONE_NUMBER. The data is as follows:

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

6 rows returned in 0.02 seconds

2. Display the name and number of players for each team.



The screenshot shows the APEX SQL Workshop interface. The top navigation bar includes 'APEX', 'App Builder', 'SQL Workshop', 'Team Development', and 'Gallery'. A search bar and user profile 'Lim Bo Yuan' are on the right. The 'SQL Commands' section shows a query:

```
1 SELECT name, number_of_players
2 FROM teams;
```

 The 'Results' tab is active, displaying a table with 4 rows. The table has columns: NAME and NUMBER_OF_PLAYERS. The data is as follows:

NAME	NUMBER_OF_PLAYERS
Jets	10
Rockets	25
Celtics	42
Rovers	8

4 rows returned in 0.01 seconds

3. Display the name, description and category for every item in the table

The screenshot shows the APEX SQL Workshop interface. At the top, there's a navigation bar with 'APEX', 'App Builder', 'SQL Workshop', 'Team Development', and 'Gallery'. A search bar and user profile 'Lim Bo Yuan' are also present. Below this, the 'SQL Commands' section shows the schema 'WKSP_BOYUAN'. The 'Language' is set to 'SQL' and 'Rows' to '10'. The SQL command entered is:

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

The 'Results' tab is active, displaying a table with 5 rows. The table has three columns: 'NAME', 'DESCRIPTION', and 'CATEGORY'. The data is as follows:

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 quaity baseball bat	equipment

At the bottom, it states '5 rows returned in 0.01 seconds' with a 'Download' link.

SQL3-DML2 PART 2

Section 6 Lesson 6 Exercise 2: Retrieving Data Using SELECT

Write and Execute SELECT statements (S6L6 Objective 2)

In this exercise you will retrieve data that is stored in the database system by using a SELECT statement.

Part 1: Using Arithmetic Operators

1. Every customer has been told they can pay off their current balance over a 12 month period. Display the customer's first name, last name, current balance and monthly payment.

The screenshot shows the APEX SQL Workshop interface. At the top, there's a navigation bar with 'APEX', 'App Builder', 'SQL Workshop', 'Team Development', and 'Gallery'. A search bar and user profile 'Lim Bo Yuan' are also present. Below this, the 'SQL Commands' section shows a schema dropdown set to 'WKSP_BOYUAN'. The 'Language' is set to 'SQL' and 'Rows' to '10'. The SQL command entered is:

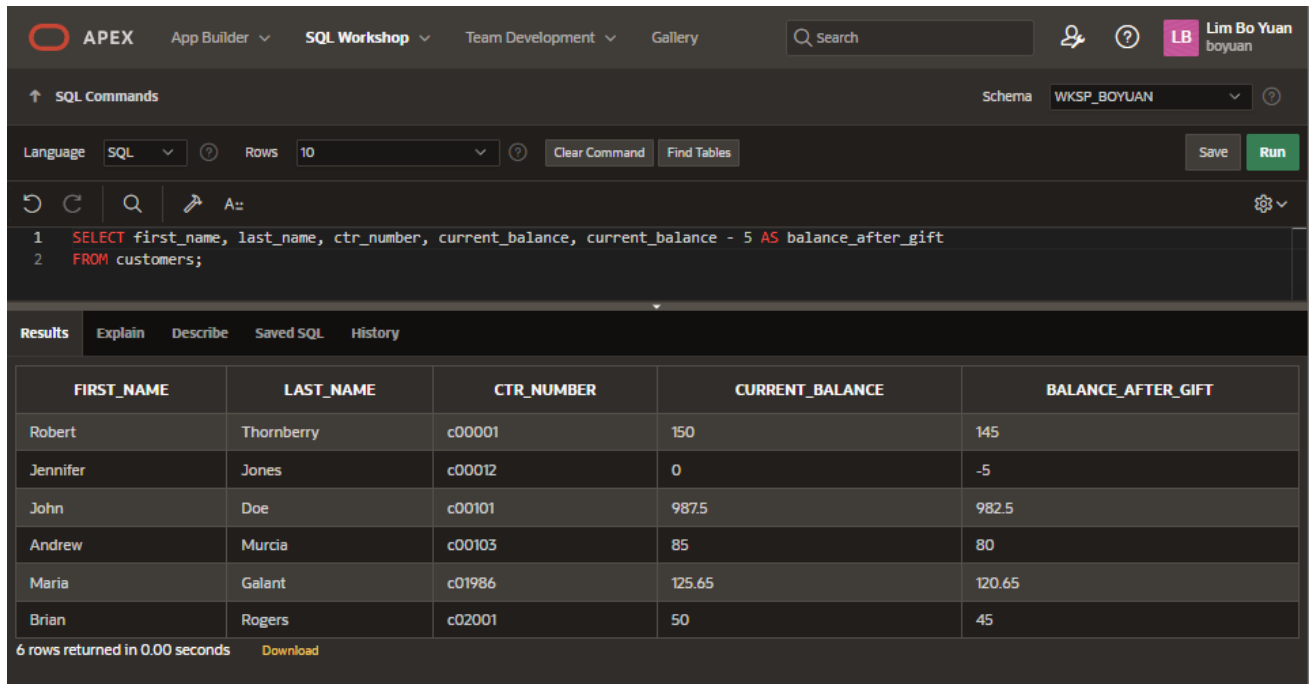
```
1 SELECT first_name, last_name, current_balance, current_balance/ 12 AS monthly_payment
2 FROM customers;
```

The 'Results' tab is active, displaying a table with 6 rows. The columns are FIRST_NAME, LAST_NAME, CURRENT_BALANCE, and MONTHLY_PAYMENT. The data is as follows:

FIRST_NAME	LAST_NAME	CURRENT_BALANCE	MONTHLY_PAYMENT
Robert	Thornberry	150	12.5
Jennifer	Jones	0	0
John	Doe	9875	82.291666666666666666666666666667
Andrew	Murcia	85	7.08333333333333333333333333333333
Maria	Galant	125.65	10.47083333333333333333333333333333
Brian	Rogers	50	4.16666666666666666666666666666667

At the bottom, it states '6 rows returned in 0.00 seconds' and provides a 'Download' link.

2. Obl is considering giving a gift card to all its customers of 5.00 that can be used to reduce their current balance. Write a query that will show the customers first name, last name, customer number, current balance and the value of their balance minus the gift value.



The screenshot shows the Oracle APEX SQL Workshop interface. The top navigation bar includes 'APEX', 'App Builder', 'SQL Workshop', 'Team Development', and 'Gallery'. A search bar and user profile 'Lim Bo Yuan' are also visible. The 'SQL Commands' section shows a query in the 'SQL' language, with 'Rows' set to 10. The query is:

```
1 SELECT first_name, last_name, ctr_number, current_balance, current_balance - 5 AS balance_after_gift
2 FROM customers;
```

The 'Results' tab is active, displaying a table with 6 rows. The table has 5 columns: FIRST_NAME, LAST_NAME, CTR_NUMBER, CURRENT_BALANCE, and BALANCE_AFTER_GIFT. The data is as follows:

FIRST_NAME	LAST_NAME	CTR_NUMBER	CURRENT_BALANCE	BALANCE_AFTER_GIFT
Robert	Thornberry	c00001	150	145
Jennifer	Jones	c00012	0	-5
John	Doe	c00101	987.5	982.5
Andrew	Murcia	c00103	85	80
Maria	Galant	c01986	125.65	120.65
Brian	Rogers	c02001	50	45

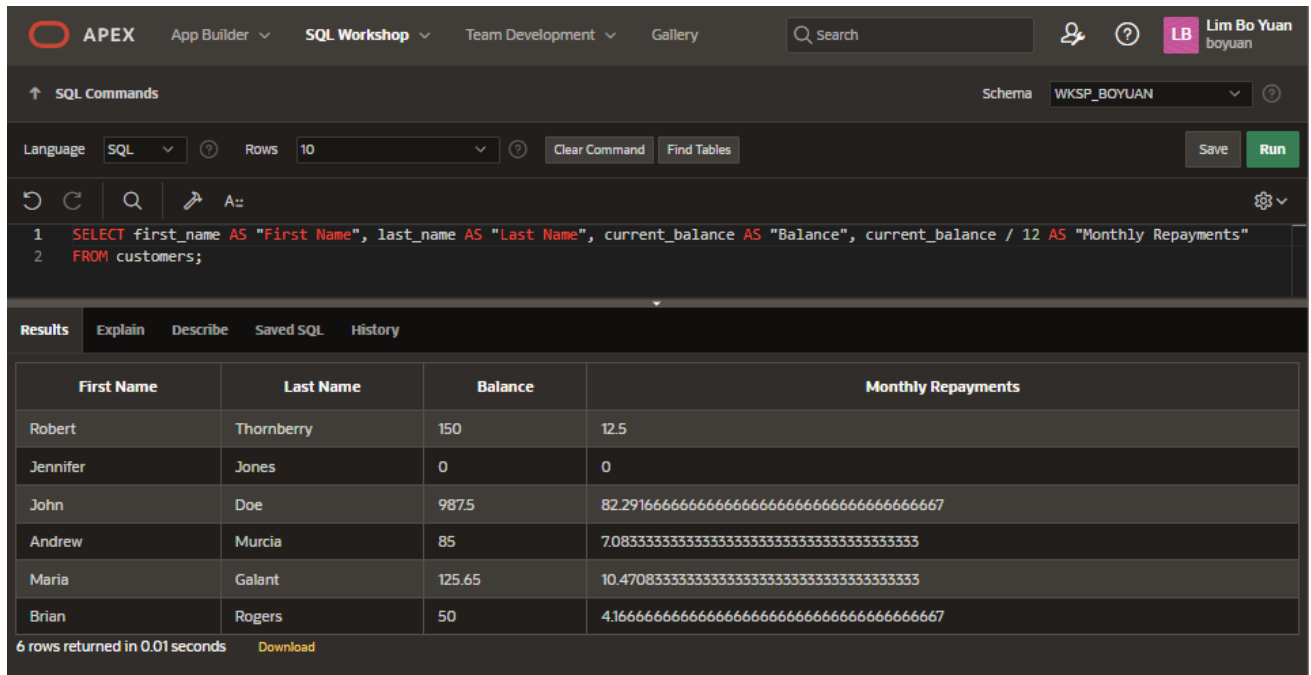
At the bottom, it states '6 rows returned in 0.00 seconds' and provides a 'Download' link.

3. What would be the problem with implementing this scheme?

If the deduction exceeds the customer's current balance, it might result in negative balances, just like Jennifer with current_balance will change from 0 to the negative value -5 after the deduction.

Part 2 : Using Column Aliases

1. You previously wrote a query that display the customer's first name, last name, current balance and monthly payment. Rewrite the query to use First Name, Last Name, Balance and Monthly Repayments as the column aliases. The aliases are to be shown exactly as described (case sensitive).



The screenshot shows the APEX SQL Workshop interface. The top navigation bar includes 'APEX', 'App Builder', 'SQL Workshop', 'Team Development', and 'Gallery'. A search bar is on the right. Below the navigation bar, the 'SQL Commands' section shows the schema 'WKSP_BOYUAN'. The 'Language' is set to 'SQL' and 'Rows' is set to '10'. The 'Run' button is highlighted. The SQL command area contains the following query:

```
1 SELECT first_name AS "First Name", last_name AS "Last Name", current_balance AS "Balance", current_balance / 12 AS "Monthly Repayments"
2 FROM customers;
```

The 'Results' tab is selected, showing a table with 6 rows and 4 columns: 'First Name', 'Last Name', 'Balance', and 'Monthly Repayments'. The data is as follows:

First Name	Last Name	Balance	Monthly Repayments
Robert	Thornberry	150	12.5
Jennifer	Jones	0	0
John	Doe	987.5	82.291666666666666666666666666667
Andrew	Murcia	85	7.08333333333333333333333333333333
Maria	Galant	125.65	10.47083333333333333333333333333333
Brian	Rogers	50	4.16666666666666666666666666666667

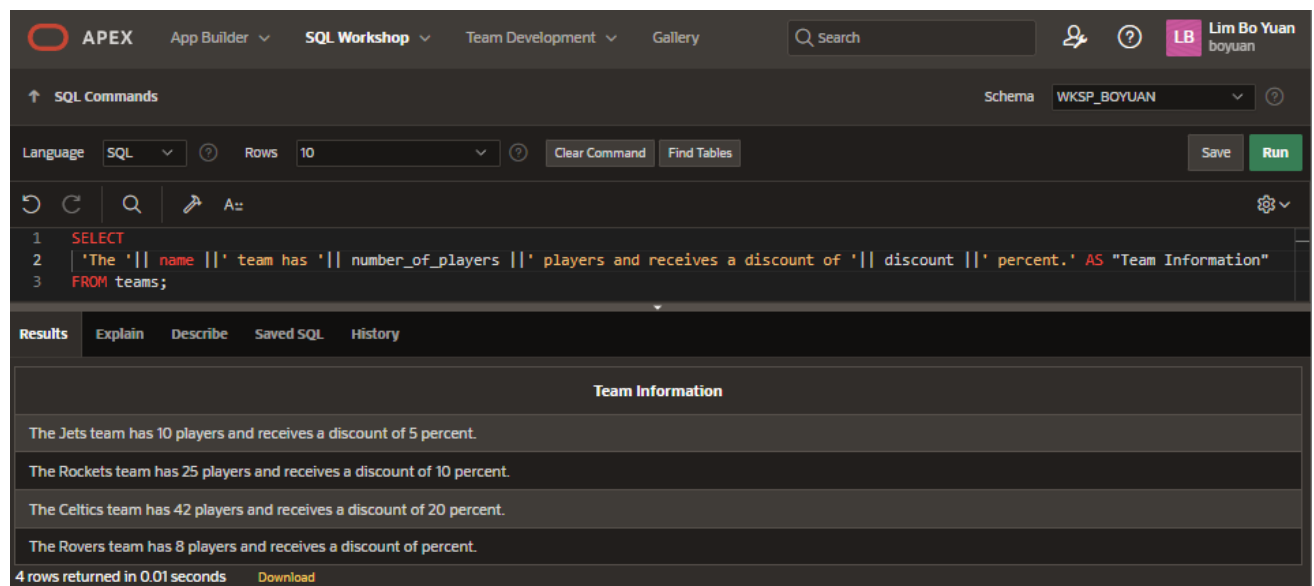
6 rows returned in 0.01 seconds [Download](#)

Part 3: Using Literal Character Strings

1. Write a query that will display the team information in the following format:

The Rockets team has 25 players and receives a discount of 10 percent.

Use **Team Information** as the column alias.



The screenshot shows the APEX SQL Workshop interface. The top navigation bar includes 'APEX', 'App Builder', 'SQL Workshop', 'Team Development', and 'Gallery'. The 'SQL Commands' tab is active, showing a query in the editor. The query is:

```
1 SELECT
2 'The ' || name || ' team has ' || number_of_players || ' players and receives a discount of ' || discount || ' percent.' AS "Team Information"
3 FROM teams;
```

The results are displayed in a table with the column alias 'Team Information'. The table contains four rows of data:

Team Information
The Jets team has 10 players and receives a discount of 5 percent.
The Rockets team has 25 players and receives a discount of 10 percent.
The Celtics team has 42 players and receives a discount of 20 percent.
The Rovers team has 8 players and receives a discount of percent.

At the bottom, it indicates '4 rows returned in 0.01 seconds' and provides a 'Download' link.

2. Why does the last team not show a discount?

The Rovers team does not show a discount because the value in the discount column of the Rovers team has a NULL value. In SQL, a NULL value represents the absence of a value or an undefined value.

SQL3-DML2 PART 3

Section 6 Lesson 7 Exercise 1: Restricting Data Using WHERE

Limit rows using WHERE (S6L7 Objective 1)

In this exercise you will refine the data that is returned in your query by adding a WHERE clause to your SELECT statement.

Part 1: Using the WHERE Clause.

1. Using the unique customer number in the where clause display all columns for Maria Galant.

The screenshot shows the APEX SQL Workshop interface. The SQL Commands panel contains the following query:

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

The Results panel shows the output of the query:

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

1 rows returned in 0.01 seconds

2. Display the first name, last name and customer number for all customers who have a current balance of greater than 100. Use an appropriate alias for your column headings.

The screenshot shows the APEX SQL Workshop interface. The SQL Commands panel contains the following query:

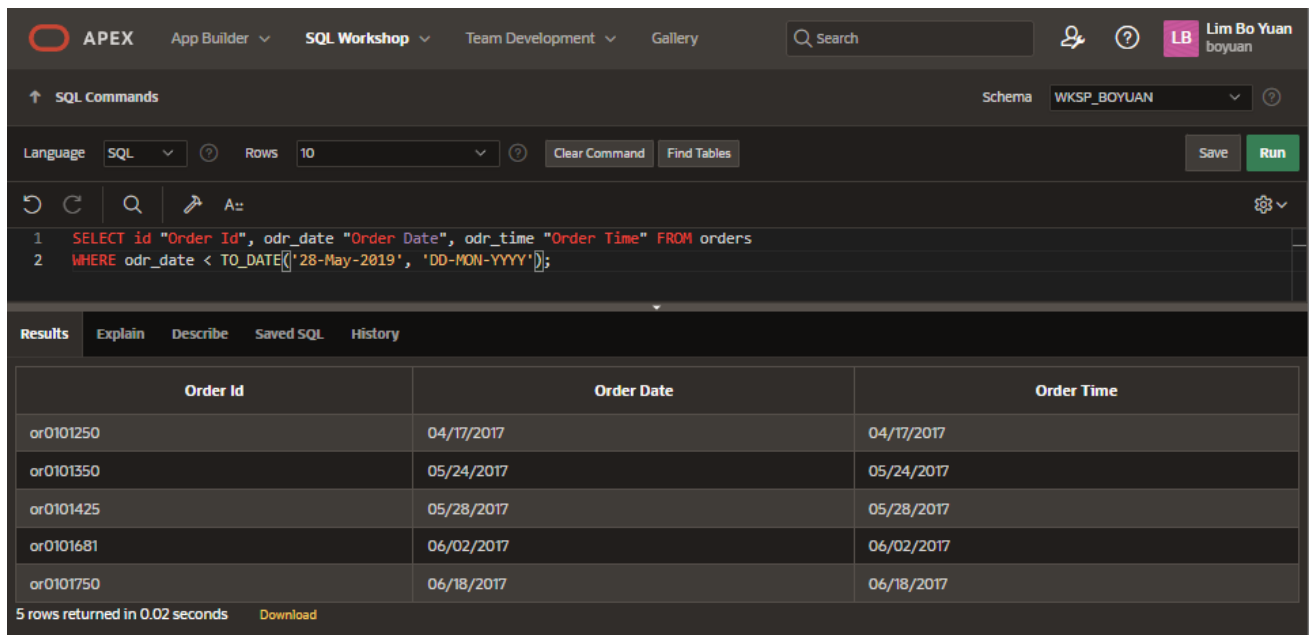
```
1 SELECT first_name "First Name" , last_name "Last Name" , ctr_number "Customer Number" FROM customers
2 WHERE current_balance > 100;
```

The Results panel shows the output of the query:

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

3 rows returned in 0.01 seconds

3. Display the order id, date and time of all orders that were placed before the 28th of May 2019. Use an appropriate alias for your column headings.



The screenshot shows the APEX SQL Workshop interface. At the top, there's a navigation bar with 'APEX', 'App Builder', 'SQL Workshop', 'Team Development', and 'Gallery'. A search bar and user profile 'Lim Bo Yuan' are also present. Below this, the 'SQL Commands' section shows a schema dropdown set to 'WKSP_BOYUAN'. The 'Language' is set to 'SQL' and 'Rows' to '10'. The SQL command entered is:

```
1 SELECT id "Order Id", odr_date "Order Date", odr_time "Order Time" FROM orders
2 WHERE odr_date < TO_DATE('28-May-2019', 'DD-MON-YYYY');
```

The 'Results' tab is active, displaying a table with 5 rows. The columns are 'Order Id', 'Order Date', and 'Order Time'. The data is as follows:

Order Id	Order Date	Order Time
or0101250	04/17/2017	04/17/2017
or0101350	05/24/2017	05/24/2017
or0101425	05/28/2017	05/28/2017
or0101681	06/02/2017	06/02/2017
or0101750	06/18/2017	06/18/2017

At the bottom, it states '5 rows returned in 0.02 seconds' with a 'Download' link.

Part 2: Range Conditions: BETWEEN Operator

1. Display the inventory id, cost and number of units using appropriate aliases for all items that have a trade cost of between 3.00 and 15.00.

The screenshot shows the APEX SQL Workshop interface. The SQL command area contains the following query:

```
1 SELECT id "Inventory Id", cost "Cost", units "Number of Units" FROM inventory_list
2 WHERE cost BETWEEN 3.00 AND 15.00;
```

The Results tab is selected, displaying a table with the following data:

Inventory Id	Cost	Number of Units
il010230125	7.99	250
il010230126	5.24	87

2 rows returned in 0.02 seconds. A Download link is available.

Part 3: Membership Conditions: IN Operator

1. Display the inventory id, cost and number of units using appropriate aliases for all items that have 50, 100, 150 or 200 units in stock.

The screenshot shows the APEX SQL Workshop interface. The SQL command area contains the following query:

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

The Results tab is selected, displaying a table with the following data:

Inventory ID	Cost	Number of Units
il010230124	2.5	100

1 rows returned in 0.01 seconds. A Download link is available.

Part 4: Membership Conditions: NOT IN Operator

1. Display the inventory id, cost and number of units using appropriate aliases for all items that do not have 50, 100, 150 or 200 units in stock.

The screenshot shows the APEX SQL Workshop interface. The SQL Commands panel contains the following query:

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

The Results panel displays the following table:

Inventory ID	Cost	Number of Units
ii010230125	799	250
ii010230126	5.24	87
ii010230127	18.95	65
ii010230128	97.46	8

4 rows returned in 0.00 seconds

Part 5: Pattern Matching: LIKE Operator

1. Display item number and name of all items that have a name that begins with g. Use an appropriate alias for your column headings.

The screenshot shows the APEX SQL Workshop interface. The SQL Commands panel contains the following query:

```
1 SELECT itm_number "Item Number", name "Item Name" FROM items
2 WHERE name LIKE 'g%';
```

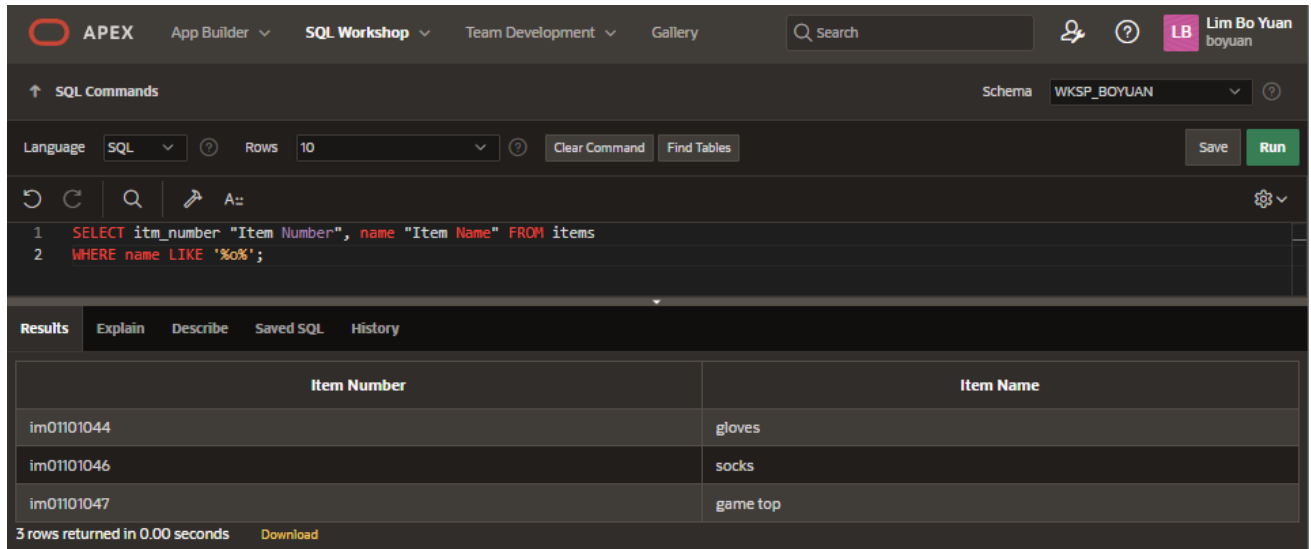
The Results panel displays the following table:

Item Number	Item Name
im01101044	gloves
im01101047	game top

2 rows returned in 0.00 seconds

Part 6 : Pattern Matching: Combining Wildcard Characters with the LIKE Operator

1. Display item number and name of all items that have a name that contain a lowercase o. Use an appropriate alias for your column headings.



The screenshot shows the APEX SQL Workshop interface. The top navigation bar includes 'APEX', 'App Builder', 'SQL Workshop', 'Team Development', and 'Gallery'. A search bar and user profile 'Lim Bo Yuan' are also visible. The 'SQL Commands' section shows the schema 'WKSP_BOYUAN'. The SQL editor contains the following query:

```
1 SELECT itm_number "Item Number", name "Item Name" FROM items
2 WHERE name LIKE '%o%';
```

The 'Results' tab is active, displaying a table with the following data:

Item Number	Item Name
im01101044	gloves
im01101046	socks
im01101047	game top

At the bottom, it indicates '3 rows returned in 0.00 seconds' and provides a 'Download' link.

SQL3-DML2 PART 4

Section 6 Lesson 7 Exercise 2: Restricting Data Using WHERE

Limit rows using WHERE (S6L7 Objective 1)

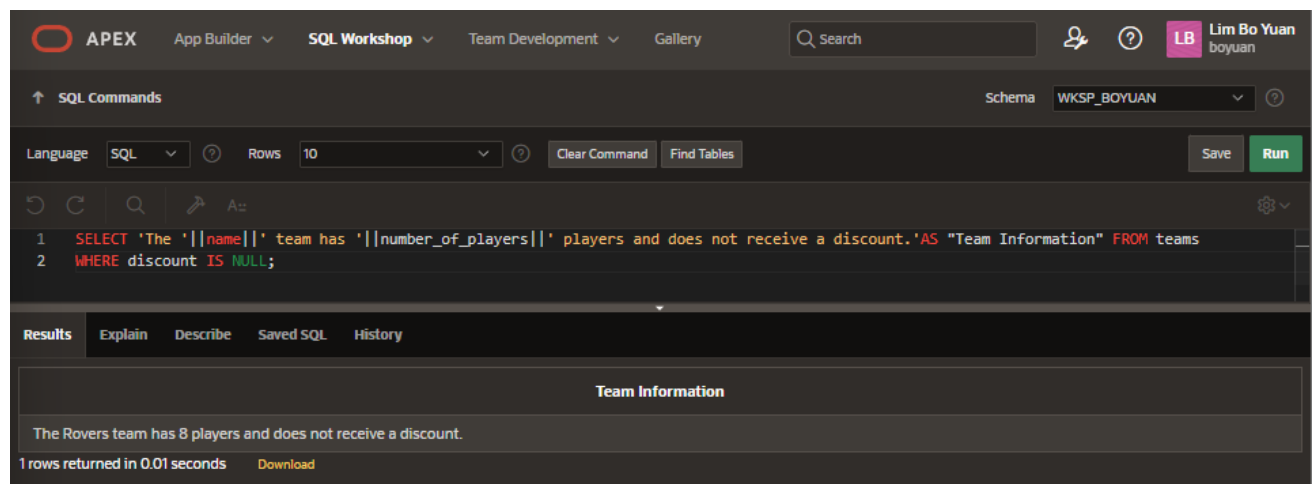
In this exercise you will refine the data that is returned in your query by adding a WHERE clause to your SELECT statement.

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.



The screenshot shows the APEX SQL Workshop interface. The top navigation bar includes 'APEX', 'App Builder', 'SQL Workshop', 'Team Development', and 'Gallery'. A search bar and user profile 'Lim Bo Yuan' are also visible. The 'SQL Commands' section shows a query with two lines:
1 SELECT 'The '||name||' team has '||number_of_players||' players and does not receive a discount.'AS "Team Information" FROM teams
2 WHERE discount IS NULL;
The 'Results' tab is active, displaying a table with the column 'Team Information' and one row: 'The Rovers team has 8 players and does not receive a discount.' The status bar at the bottom indicates '1 rows returned in 0.01 seconds' and provides a 'Download' link.

```
1 SELECT 'The '||name||' team has '||number_of_players||' players and does not receive a discount.'AS "Team Information" FROM teams
2 WHERE discount IS NULL;
```

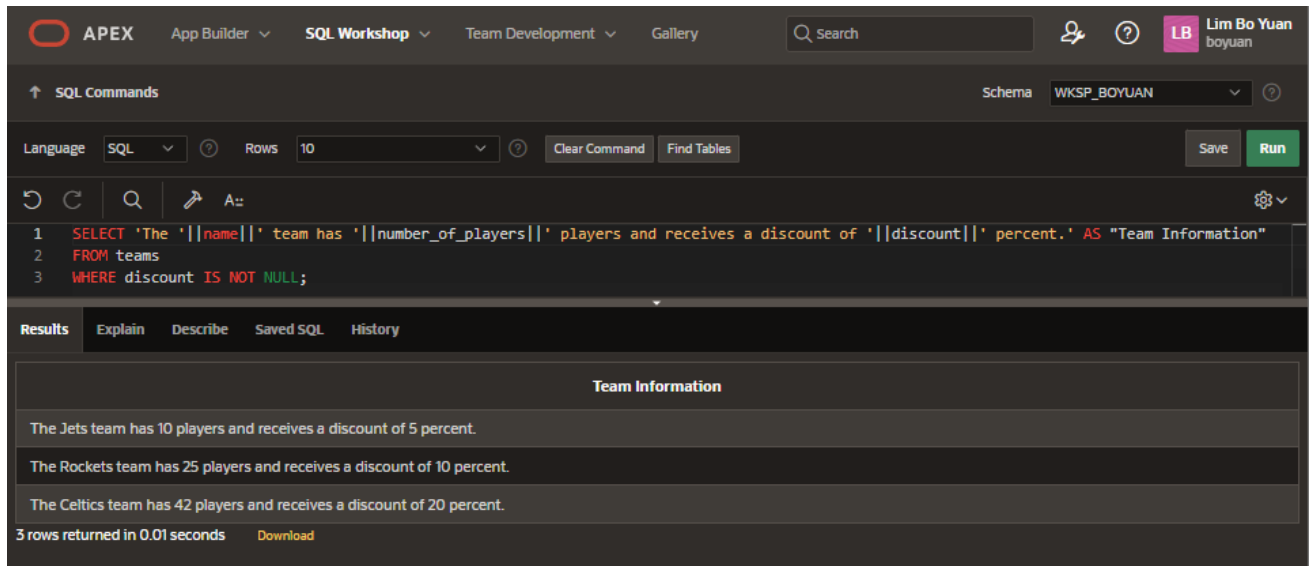
Team Information
The Rovers team has 8 players and does not receive a discount.

1 rows returned in 0.01 seconds [Download](#)

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.



The screenshot shows the APEX SQL Workshop interface. The SQL command area contains the following query:

```
1 SELECT 'The '||name||' team has '||number_of_players||' players and receives a discount of '||discount||' percent.' AS "Team Information"
2 FROM teams
3 WHERE discount IS NOT NULL;
```

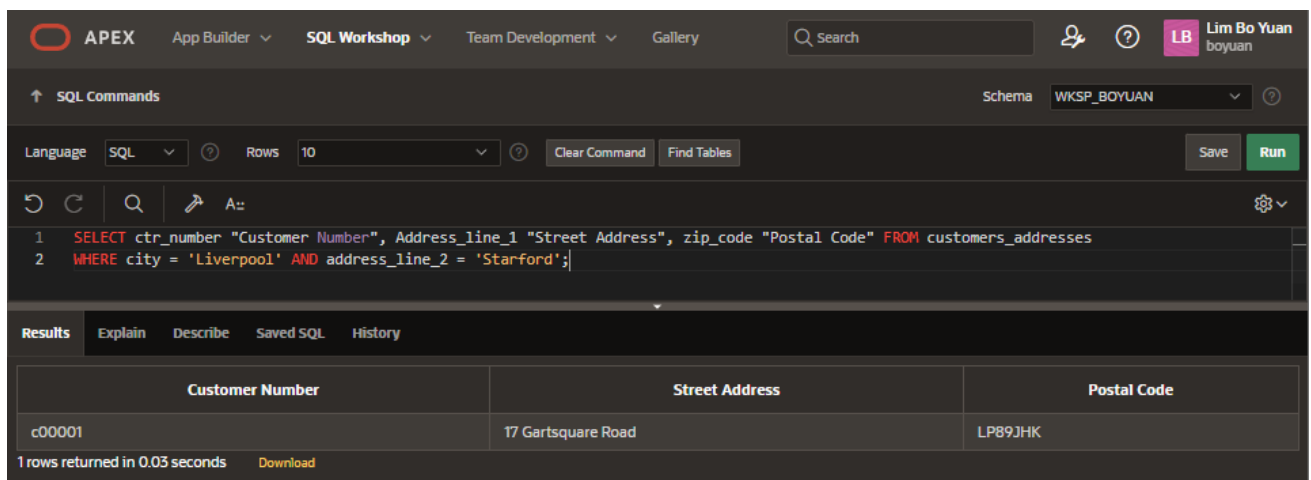
The Results tab is selected, showing the following output:

Team Information
The Jets team has 10 players and receives a discount of 5 percent.
The Rockets team has 25 players and receives a discount of 10 percent.
The Celtics team has 42 players and receives a discount of 20 percent.

3 rows returned in 0.01 seconds

Part 2: Logical Operators: AND

1. 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.



The screenshot shows the APEX SQL Workshop interface. The SQL command area contains the following query:

```
1 SELECT ctr_number "Customer Number", Address_line_1 "Street Address", zip_code "Postal Code" FROM customers_addresses
2 WHERE city = 'Liverpool' AND address_line_2 = 'Starford';
```

The Results tab is selected, showing the following output:

Customer Number	Street Address	Postal Code
c00001	17 Gartsquare Road	LP89JHK

1 rows returned in 0.03 seconds

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.

The screenshot shows the APEX SQL Workshop interface. The SQL command area contains the following query:

```
1 SELECT ctr_number "Customer Number", Address_line_1 "Street Address", zip_code "Postal Code" FROM customers_addresses
2 WHERE city = 'Liverpool' OR address_line_2 = 'Starford';
```

The Results tab is selected, displaying a table with 2 rows. The table has three columns: Customer Number, Street Address, and Postal Code.

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

2 rows returned in 0.03 seconds

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.

The screenshot shows the APEX SQL Workshop interface. The SQL command area contains the following query:

```
1 SELECT ctr_number "Customer Number", Address_line_1 "Street Address", zip_code "Postal Code" FROM customers_addresses
2 WHERE city NOT IN ('Liverpool');
```

The Results tab is selected, displaying a table with 2 rows. The table has three columns: Customer Number, Street Address, and Postal Code.

Customer Number	Street Address	Postal Code
c00101	54 Ropehill Crescent	ST45AGV
c01986	36 Watercress Lane	JP23YTH

2 rows returned in 0.00 seconds

SQL3-DML2 PART 5

Section 6 Lesson 8 Exercise 1: Sorting Data Using ORDER BY

Use the ORDER BY Clause to Sort SQL Results (S6L8 Objective 1)

In this exercise you will sort the order of the data that is returned in your query by adding an **ORDER BY** clause to the end of your SELECT statement.

1. Display the team name and number of players alphabetically in order of team name. Use an appropriate alias for your column headings.

The screenshot shows the APEX SQL Workshop interface. The top navigation bar includes 'APEX', 'App Builder', 'SQL Workshop', 'Team Development', and 'Gallery'. A search bar and user profile 'Lim Bo Yuan boyuan' are on the right. The 'SQL Commands' section shows the query: `SELECT name 'Team Name', number_of_players 'Number of Players' FROM teams ORDER BY name;`. The 'Results' tab is active, displaying a table with 4 rows. The table has two columns: 'Team Name' and 'Number of Players'. The rows are: Celtics (42), Jets (10), Rockets (25), and Rovers (8). At the bottom, it says '4 rows returned in 0.01 seconds' with a 'Download' link.

Team Name	Number of Players
Celtics	42
Jets	10
Rockets	25
Rovers	8

2. Display the team name and number of players in descending order of number of players. Use an appropriate alias for your column headings.

The screenshot shows the APEX SQL Workshop interface. The SQL Commands panel contains the following query:

```
1 SELECT name "Team Name", number_of_players "Number of Players"
2 FROM teams ORDER BY number_of_players DESC;
```

The Results panel displays the output of the query:

Team Name	Number of Players
Celtics	42
Rockets	25
Jets	10
Rovers	8

4 rows returned in 0.00 seconds

3. Display the team name and number of players alphabetically in order of team name. Use Team Name for the name alias and Players for the number of players. Sort the output in descending order of name using the alias in the ORDER BY clause.

The screenshot shows the APEX SQL Workshop interface. The SQL Commands panel contains the following query:

```
1 SELECT name "Team Name", number_of_players "Players" FROM teams
2 ORDER BY "Team Name" DESC;
```

The Results panel displays the output of the query:

Team Name	Players
Rovers	8
Rockets	25
Jets	10
Celtics	42

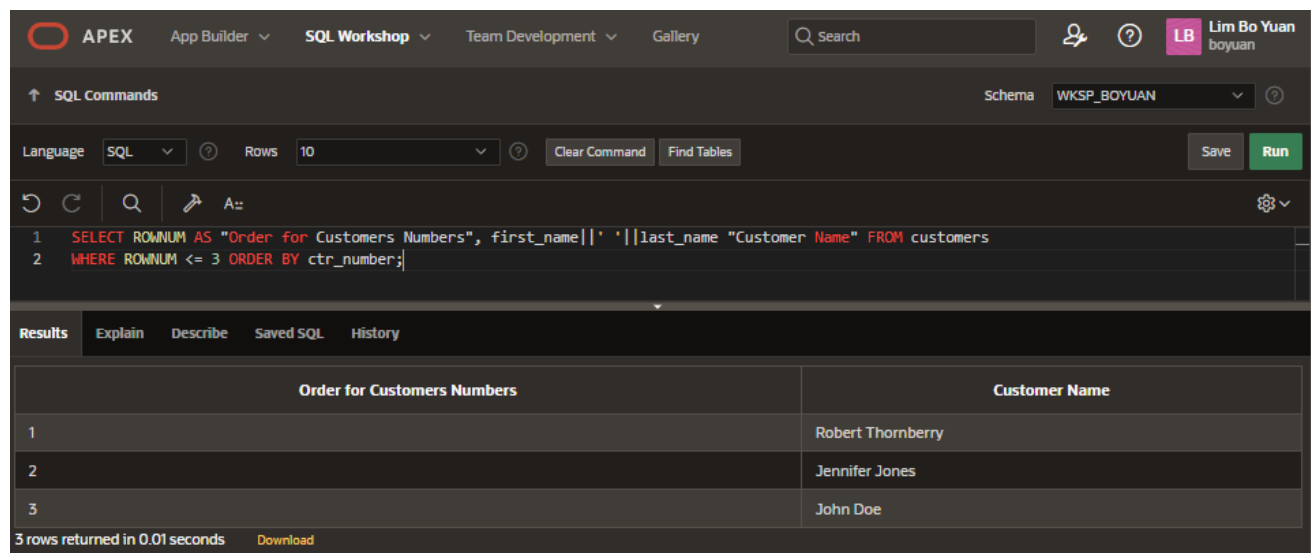
4 rows returned in 0.02 seconds

SQL3-DML2 PART 6

Section 6 Lesson 8 Exercise 2: Sorting Data Using ORDER BY

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.



The screenshot shows the APEX SQL Workshop interface. The SQL command is:

```
1 SELECT ROWNUM AS "Order for Customers Numbers", first_name||' '||last_name "Customer Name" FROM customers
2 WHERE ROWNUM <= 3 ORDER BY ctr_number;
```

The results are displayed in a table with two columns: "Order for Customers Numbers" and "Customer Name".

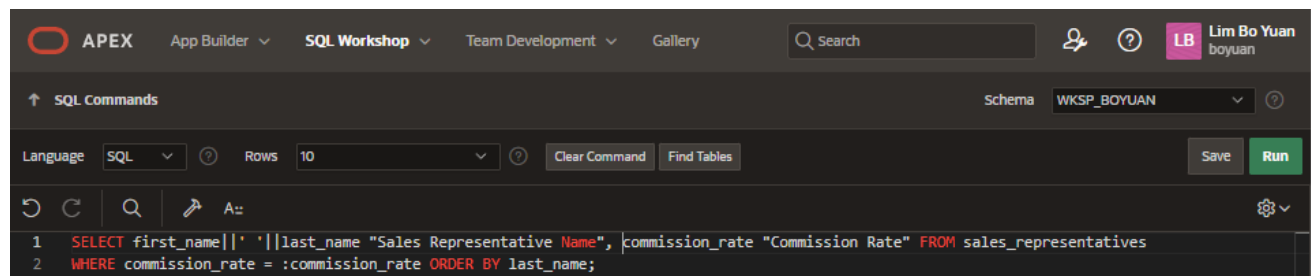
Order for Customers Numbers	Customer Name
1	Robert Thornberry
2	Jennifer Jones
3	John Doe

3 rows returned in 0.01 seconds

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.

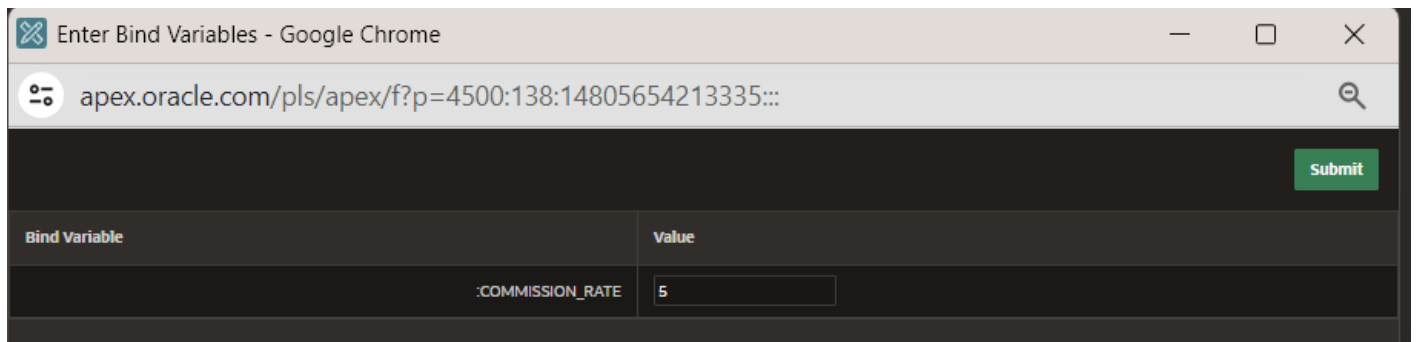
a) Code :



The screenshot shows the APEX SQL Workshop interface. The SQL command is:

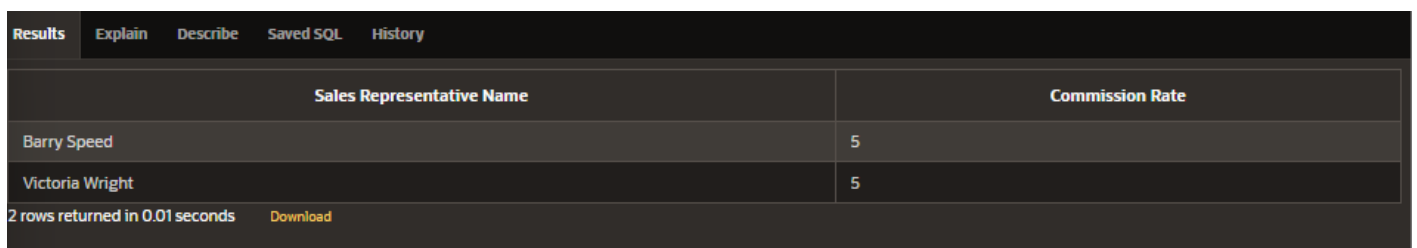
```
1 SELECT first_name||' '||last_name "Sales Representative Name", commission_rate "Commission Rate" FROM sales_representatives
2 WHERE commission_rate = :commission_rate ORDER BY last_name;
```

b) Input:



Bind Variable	Value
:COMMISSION_RATE	5

c) Result :



Results	
Explain	Describe
Saved SQL	History
Sales Representative Name	
Barry Speed	5
Victoria Wright	5
2 rows returned in 0.01 seconds	
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