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UNIVERSITI TEKNOLOGI MALAYSIA

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# **LAB 3: PART 3**

**SECD2523: DATABASE**  
**SECTION 10**

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## Database Design Project

### Oracle Baseball League Store Database

#### Project Scenario:

You are a small consulting company specializing in database development. You have just been awarded the contract to develop a data model for a database application system for a small retail store called Oracle Baseball League (OBL).

The Oracle Baseball League store serves the entire surrounding community selling baseball kit. The OBL has two types of customer, there are individuals who purchase items like balls, cleats, gloves, shirts, screen printed t-shirts, and shorts. Additionally customers can represent a team when they purchase uniforms and equipment on behalf of the team.

Teams and individual customers are free to purchase any item from the inventory list, but teams get a discount on the list price depending on the number of players. When a customer places an order we record the order items for that order in our database.

OBL has a team of three sales representatives that officially only call on teams but have been known to handle individual customer complaints.

## 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.

```
1 v | SELECT *
2   | FROM customers
3   | 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	01442736589	125.65	sr03	t003	-

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.

```
1 v | SELECT first_name, last_name, ctr_number
2   | FROM customers
3   | WHERE Current_balance > 100;
```

FIRST_NAME	LAST_NAME	CTR_NUMBER
Robert	Thornberry	c00001
John	Doe	c00101
Maria	Galant	c01986

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

```
1 v | SELECT id AS "Order_ID", odr_date AS "Order_Date", odr_time AS "Order_Time"
2   | FROM orders
3   | WHERE odr_date < '28-may-2019' AND odr_time < '28-may-2019' ;
```

Order_ID	Order_Date	Order_Time
or0101250	17-APR-17	17-APR-17
or0101350	24-MAY-17	24-MAY-17
or0101425	28-MAY-17	28-MAY-17
or0101681	02-JUN-17	02-JUN-17
or0101750	18-JUN-17	18-JUN-17

## 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.

```
1 v SELECT id AS "Inventory_ID",  
2       cost AS "Cost",  
3       units AS "Number_Of_Units"  
4 FROM inventory_list  
5 WHERE cost BETWEEN 3.00 AND 15.00;
```

Inventory_ID	Cost	Number_Of_Units
il010230125	7.99	250
il010230126	5.24	87

## 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.

```
1 v SELECT id AS "Inventory_ID", cost AS "Cost", Units AS "Number_of_Units"  
2 FROM Inventory_list  
3 WHERE units IN (50, 100, 150, 200);
```

Inventory_ID	Cost	Number_of_Units
il010230124	2.5	100

#### 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.

```
1 v SELECT id AS "Inventory_ID", cost AS "Cost", Units AS "Number_of_Units"  
2 FROM Inventory_list  
3 WHERE units NOT IN (50, 100, 150, 200);
```

Inventory_ID	Cost	Number_of_Units
il010230125	7.99	250
il010230126	5.24	87
il010230127	18.95	65
il010230128	97.46	8

#### 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.

```
1 v SELECT itm_number AS "Item_Number", name  
2 FROM items  
3 WHERE name LIKE 'g%';
```

Item_Number	NAME
im01101044	gloves
im01101047	game top

## 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.

```
1 v SELECT itm_number AS "Item_Number", name
2   FROM items
3  WHERE name LIKE '%o%';
```

Item_Number	NAME
im01101044	gloves
im01101046	socks
im01101047	game top