



UTM
UNIVERSITI TEKNOLOGI MALAYSIA

Faculty of Computing

DATABASE

LAB 3

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Section 6 Lesson 6

Exercise 1

Part 1.

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

Part 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;`

Section 6 Lesson 6 Exercise 2

Part 1.

1. `SELECT first_name, last_name, current_balance / 12 FROM CUSTOMERS;`
2. `SELECT first_name, last_name, ctr_number, current_balance - 5 FROM CUSTOMERS;`
3. For current balance that can't be 0

Part 2.

1. `SELECT first_name AS 'First Name', last_name AS 'Last Name', current_balance AS 'Balance',
current_balance / 12 AS 'Monthly Payment' FROM CUSTOMERS`

Part 3

1. `SELECT 'The' || name || 'team has' || number_of_players || 'players and receives a discount of' || discount
|| 'percent' AS "Team Information" FROM TEAMS;`
2. There is a NULL value in the discount attribute of last team

Section 6 Lesson 7 Exercise 1: Restricting Data Using WHERE

Part 1.

1. `SELECT * FROM CUSTOMERS WHERE ctf_number = 'c01986';`
2. `SELECT first_name AS 'First Name', last_name AS 'Last Name', ctf_number AS 'Customer Number'
FROM CUSTOMERS WHERE current_balance > 100`
3. `SELECT id AS 'Order ID', odr_date AS 'Order Date', odr_time AS 'Order Time' FROM ORDERS
WHERE To_DATE(odr_date, 'mm/dd/yyyy') < To_DATE('05/28/2019', 'mm/dd/yyyy');`

Part 2.

1. `SELECT id AS 'Inventory ID', cost AS 'Cost', units AS 'Number of Units'
FROM INVENTORY-LIST WHERE cost BETWEEN 3:00 AND 15:00.`

part 3.

1. `SELECT id AS 'Inventory ID', cost AS 'Cost', units AS 'Number
of Units' FROM INVENTORY-LIST WHERE units IN (50, 100, 150, 200);`

Part 4

1. `SELECT id AS 'Inventory ID', cost AS 'Cost', units AS 'Number of Units'
WHERE units NOT IN (50, 100, 150, 200);`

Part 5.

`SELECT itm-number AS 'Item Number', name AS 'Name' FROM ITEMS
WHERE name LIKE 'g%';`

Part 6,

```
SELECT itm.number AS "Item Number", name AS 'Name' FROM ITEMS WHERE name LIKE '-0%';
```

Section 6 Lesson 7 Exercise 2

Part 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 receives a discount of' || discount || 'percent.' AS "Team Information" FROM TEAMS WHERE discount IS NOT NULL.

Part 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';

Part 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';

Part 4

```
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');
```

Section 6 Lesson 8 Exercise 1.

1. SELECT name AS "Team Name", number-of-players AS "Player" FROM TEAMS ORDER
By name;
2. SELECT name AS "Team Name", number-of-players AS "Player" FROM TEAMS ORDER BY
numbers-of-players DESC;
3. SELECT name AS "Team Name", number-of-players AS "Players" FROM TEAMS ORDER BY name DESC;

Section 6 Lesson 8 Exercise 2.

Part 1.

```
SELECT ROWNUM AS "Customers number", first.name || ' ' || last-name  
AS "Customer Name" FROM (SELECT first-name, last-name FROM CUSTOMERS)  
WHERE ROWNUM <= 3;
```

Part 2.

```
SELECT first-name AS "First Name", last-name AS "Last Name",  
commission-rate AS "Commission Rate" FROM SALES-REPRESENTATIVES  
WHERE commission-rate <: commission-rate ORDER BY last-name;
```