FACULTY OF COMPUTING
UTM Johor Bahru

SECD2523
SECTION 10

LECTURER: ROZILAWATI BINTI DOLLAH @ MD ZAIN

PROJECT TITLE:
SQL LAB3
(DML2)
PART2

NAME	MATRIC NUMBER
NADIA SYAHADAH BINTI SAHARUDIN	A22EC0225

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.

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

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

Script Output × ▶ Query Result ×

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	FIRST_NAME	LAST_NAME	CURRENT_BALANCE	MONTHLY_PAYMENT
1	Robert	Thornberry	150	12.5
2	Jennifer	Jones	0	0
3	John	Doe	987.5	82.2916666666666666666666666666666666667
4	Andrew	Murcia	85	7.08333333333333333333333333333333333333
5	Maria	Galant	125.65	10.4708333333333333333333333333333333333
6	Brian	Rogers	50	4.16666666666666666666666666666666666667

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.

       SELECT first_name,last_name,current_balance,current_balance-5.00 AS
       adjusted_balance
       FROM customers;

```
SELECT first_name,last_name,ctr_number,current_balance,current_balance - 5.00 AS adjusted_balance
FROM customers;
```

Script Output × ▶ Query Result ×

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	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	Rogers	c02001	50	45

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

The new current balance after deduction RM5.00 from the gift card can be a negative value if the current value before deduction is less than RM5.00.

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).
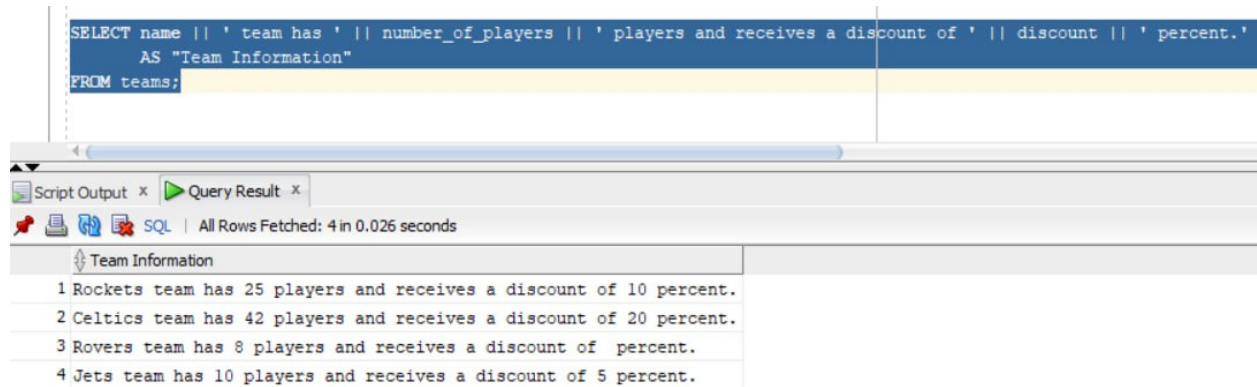
SELECT first _name AS "First Name", last_name AS AS "Last Name", current balance AS "Balance", current balance/12 AS "Monthly Repayments" FROM customers;

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

Script Output ×   Query Result ×

SQL | All Rows Fetched: 6 in 0.005 seconds

	First Name	Last Name	Balance	Monthly Repayments
1	Robert	Thornberry	150	12.5
2	Jennifer	Jones	0	0
3	John	Doe	987.5	82.2916666666666666666666666666666666667
4	Andrew	Murcia	85	7.08333333333333333333333333333333333333
5	Maria	Galant	125.65	10.4708333333333333333333333333333333333
6	Brian	Rogers	50	4.16666666666666666666666666666666666667

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.

> **SELECT name ||'team has'|| number_of_players||'players and receives a discount of'|| discount|| 'percent.' AS "Team Information"**
> **FROM teams;**

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

Script Output ✕ | Query Result ✕

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

2. Why does the last team not show a discount

> Team Rovers does not show the discount because their team has a NULL value in the discount column.