

**TUGAS 8 NF ACADEMY  
FULLSTACK WEB DEVELOPER  
'Database MySQL/MariaDB'**

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**SOAL**

**SOAL 6.1**

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1. Buatlah Procedure untuk mengupdate harga\_jual berdasarkan jenis produk tertentu (jenis\_produk\_id), beri nama procedure **pro\_naikan\_harga** memiliki parameter yang akan menerima argumen: Jenis Produk ID dan Persentase kenaikan harga.

*CREATE PROCEDURE ...*

*DELIMITER \$\$*

*MariaDB [dbpos1]> CREATE PROCEDURE pro\_naik(*

*-> IN jenis\_produk INT,*

*-> IN persentase\_kenaikan INT )*

*-> BEGIN*

*-> UPDATE produk SET harga\_jual = harga\_jual + (harga\_jual \*  
persentase\_kenaikan / 100)*

*-> WHERE jenis\_produk\_id = jenis\_produk;*

*-> END \$\$*

*DELIMITER ;*

*MariaDB [dbpos1]> CALL pro\_naik(1,4); 4 disini adalah 4%*

*CREATE PROCEDURE pro\_naikan\_harga*

```
mysql> DELIMITER ;
mysql> CALL pro_naik(1,4) ;
Query OK, 3 rows affected (0.06 sec)

mysql> DELIMITER $$
mysql> CREATE PROCEDURE pro_naikan_harga(
->     IN jenis_produk_id INT,
->     IN persentase_kenaikan DECIMAL(5,2)
-> )
-> BEGIN
-> UPDATE produk
->     SET harga_jual = harga_jual + (harga_jual * persentase_kenaikan / 100)
->     WHERE jenis_produk_id = jenis_produk_id;
-> END $$
Query OK, 0 rows affected (0.01 sec)

mysql> DELIMITER ;
mysql> CALL pro_naikan_harga(1, 4);
Query OK, 9 rows affected (0.00 sec)
```

2. Buat fungsi **umur** dengan parameter yang menerima inputan argumen tipe data date dan mengembalikan hasil perhitungan umur (tahun sekarang dikurang tahun inputan) dengan tipe data bilangan bulat (integer) positif.

*CREATE FUNCTION ...*

MariaDB [dbpos1]> CREATE FUNCTION umur(tgl\_lahir DATE)

-> RETURNS INT

-> BEGIN

-> DECLARE umur INT;

-> SET umur = YEAR(CURDATE()) - YEAR(tgl\_lahir);

-> RETURN umur;

-> END \$\$

Query OK, 0 rows affected (0.038 sec)

MariaDB [dbpos1]> SELECT nama, umur(tgl\_lahir) AS umur FROM pelanggan;

```
mysql> DELIMITER $$
mysql> CREATE FUNCTION umur(tgl_lahir DATE)
  -> RETURNS INT
  -> BEGIN
  -> DECLARE umur INT;
  -> SET umur = YEAR(CURDATE())- YEAR(tgl_lahir);
  -> RETURN umur;
  -> END $$
Query OK, 0 rows affected (0.01 sec)

mysql> SELECT nama, umur(tgl_lahir) AS umur FROM pelanggan;
  -> ^C
mysql> DELIMITER ;
mysql> SELECT nama, umur(tgl_lahir) AS umur FROM pelanggan;
+-----+-----+
| nama          | umur |
+-----+-----+
| Agung Sedayu  | 14   |
| Pandan Wangi  | 74   |
| Sekar Mirah   | 41   |
| Swandaru Geni | 43   |
| Pradabashu    | 39   |
| Gayatri Dwi   | 37   |
| Dewi Gyat     | 36   |
| Andre Haru    | 34   |
| Ahmad Hasan   | 32   |
| Cassanndra    | 34   |
+-----+-----+
10 rows in set (0.02 sec)
```

3. Buat fungsi **kategori\_harga** dengan parameter yang menerima inputan argument tipe data double dan mengembalikan tipe data string kategori harga berdasarkan:
- 0 – 500rb : murah
  - 500rb – 3 juta : sedang
  - 3jt – 10 juta : mahal
  - > 10 juta : sangat mahal

```
mysql> DELIMITER $$
mysql> CREATE FUNCTION kategori_harga(harga DOUBLE)
-> RETURNS VARCHAR(15)
-> DETERMINISTIC
-> BEGIN
-> DECLARE kategori VARCHAR(15);
-> IF harga <= 500000 THEN
-> SET kategori = 'murah';
-> ELSEIF harga > 500000 AND harga <= 3000000 THEN
-> SET kategori = 'sedang';
-> ELSEIF harga > 3000000 AND harga <= 10000000 THEN
-> SET kategori = 'mahal';
-> ELSE
-> SET kategori = 'sangat mahal';
-> END IF;
-> RETURN kategori;
-> END $$
Query OK, 0 rows affected (0.01 sec)

mysql> DELIMITER ;
mysql> SELECT nama, harga, kategori_harga(harga) AS kateg
ERROR 1064 (42000): You have an error in your SQL syntax;
on for the right syntax to use near 'FORM produk' at line
mysql> SELECT nama, harga, kategori_harga(harga) AS kateg
-> FROM produk;
ERROR 1054 (42S22): Unknown column 'harga' in 'field list'
mysql> SELECT nama, harga_jual, kategori_harga(harga_jual
-> FROM produk;
```

nama	harga_jual	kategori
Televisi 21 inch	5669314.56	sangat mahal
Televisi 40 inch	8368988.16	sangat mahal
Kulkas 2 pintu	5264363.52	sangat mahal
Meja Makan	686400	sangat mahal
Teh Kotak	4404.4	murah
PC Desktop HP	9984000	sangat mahal
Teh Botol	3146	murah
Notebook Acer	11232000	sangat mahal
Notebook Lenovo	12480000	sangat mahal

```
9 rows in set (0.00 sec)
```

## SOAL 5.2

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1. Buatlah sebuah transaction dengan skenario-skenario statement sebagai berikut:

- Mulai transaction
- Insert data produk sebanyak 3 record
- Update data stok salah satu produk
- Buat savepoint
- Hapus salah satu data pembayaran
- Kembali ke savepoint
- Update data iuran salah satu kartu
- Akhiri transaction dengan commit

```
mysql> INSERT INTO produk (nama, harga_beli, harga_jual, stok, min_stok, jenis_produk_id) VALUES
-> ('SNK01', 'Snack Tricks Kuning', '4000', '5000', '100', '2'),
-> ('SNK02', 'Snack Tricks Merah', '4700', '6000', '100', '2'),
-> ('NSF01', 'Nescafe Ice Black', '6800', '7000', '10', '2');
Query OK, 3 rows affected, 3 warnings (0.00 sec)
Records: 3 Duplicates: 0 Warnings: 3

mysql> UPDATE produk SET stok = 25 WHERE id = 4;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> SAVEPOINT update_produk;
Query OK, 0 rows affected (0.00 sec)

mysql> DELETE pembayaran WHERE id = 9;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'WHERE id = 9' at line 1
mysql> DELETE FROM pembayaran WHERE id = 9;
Query OK, 1 row affected (0.00 sec)

mysql> ROLLBACK TO update_produk;
Query OK, 0 rows affected (0.00 sec)

mysql> UPDATE kartu SET iuran = 50000 WHERE id_kartu = 6;
ERROR 1054 (42S22): Unknown column 'id_kartu' in 'where clause'
mysql> UPDATE kartu SET iuran = 50000 WHERE id = 6;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> COMMIT;
Query OK, 0 rows affected (0.00 sec)
```