PRAKTIKUM MODUL 3

Pertama membuat Database bernama apotek

```sql
CREATE DATABASE IF NOT EXISTS apotek;
USE apotek;

-- CREATE TABLE

CREATE TABLE defecta (
  id_defecta INT NOT NULL,
  tanggal DATE,
  keterangan VARCHAR(255),
  PRIMARY KEY (id_defecta)
);

CREATE TABLE log_aktivitas (
  id_log INT,
  tanggal DATE,
  aktivitas VARCHAR(255),
  PRIMARY KEY (id_log)
);

CREATE TABLE sisa_stok_barang (
  id_obat INT,
  nama_obat VARCHAR(255),
  stok_obat INT,
  PRIMARY KEY (id_obat)
);

CREATE TABLE obat_keluar (
  id_obat_keluar INT,
  tanggal DATE,
  id_obat INT,
  jumlah INT,
  PRIMARY KEY (id_obat_keluar),
  FOREIGN KEY (id_obat) REFERENCES sisa_stok_barang (id_obat)
);

CREATE TABLE penerimaan_barang (
  id_penerimaan_barang INT,
  tanggal DATE,
  id_obat INT,
```

```sql
  jumlah INT,
  keterangan VARCHAR(255),
  PRIMARY KEY (id_penerimaan_barang),
  FOREIGN KEY (id_obat) REFERENCES sisa_stok_barang (id_obat)
);

CREATE TABLE penerimaan_resep (
  id_penerimaan_resep INT,
  tanggal DATE,
  resep VARCHAR(255),
  id_obat INT,
  jumlah INT,
  nama_pasien VARCHAR(255),
  nama_dokter VARCHAR(255),
  PRIMARY KEY (id_penerimaan_resep),
  FOREIGN KEY (id_obat) REFERENCES sisa_stok_barang (id_obat)
);

-- INPUT DATA

INSERT INTO sisa_stok_barang VALUES
(1, 'Paracetamol', 50),
(2, 'Amoxicillin', 20),
(3, 'Loratadine', 30),
(4, 'Omeprazole', 10),
(5, 'Aspirin', 40),
(6, 'Metformin', 25),
(7, 'Atorvastatin', 15),
(8, 'Simvastatin', 30),
(9, 'Ciprofloxacin', 20),
(10, 'Metronidazole', 35),
(11, 'Azithromycin', 25),
(12, 'Diazepam', 15),
(13, 'Furosemide', 20),
(14, 'Ibuprofen', 40),
(15, 'Losartan', 10),
(16, 'Naproxen', 30),
(17, 'Prednisone', 25),
(18, 'Propranolol', 20),
(19, 'Sildenafil', 10),
(20, 'Tramadol', 15);
```

```sql
INSERT INTO defecta (id_defecta, tanggal, keterangan)
VALUES
(1, '2023-05-01', 'Obat cacat'),
(2, '2023-05-03', 'Kemasan rusak'),
(3, '2023-05-05', 'Obat kadaluarsa'),
(4, '2023-05-08', 'Obat pecah'),
(5, '2023-05-10', 'Kadaluarsa'),
(6, '2023-05-11', 'Cacat'),
(7, '2023-05-12', 'Kemasan rusak'),
(8, '2023-05-15', 'Obat pecah'),
(9, '2023-05-17', 'Kemasan rusak'),
(10, '2023-05-20', 'Obat kadaluarsa'),
(11, '2023-05-21', 'Obat cacat'),
(12, '2023-05-23', 'Kemasan rusak'),
(13, '2023-05-26', 'Obat kadaluarsa'),
(14, '2023-05-29', 'Obat cacat'),
(15, '2023-05-30', 'Kemasan rusak');

INSERT INTO log_aktivitas (id_log, tanggal, aktivitas)
VALUES
(1, '2023-05-01', 'Masuk aplikasi'),
(2, '2023-05-02', 'Pencarian obat'),
(3, '2023-05-03', 'Penerimaan barang'),
(4, '2023-05-05', 'Penjualan obat'),
(5, '2023-05-07', 'Penerimaan resep'),
(6, '2023-05-09', 'Pencarian obat'),
(7, '2023-05-12', 'Penerimaan barang'),
(8, '2023-05-14', 'Penjualan obat'),
(9, '2023-05-17', 'Penerimaan resep'),
(10, '2023-05-19', 'Masuk aplikasi'),
(11, '2023-05-22', 'Pencarian obat'),
(12, '2023-05-24', 'Penerimaan barang'),
(13, '2023-05-27', 'Penjualan obat'),
(14, '2023-05-29', 'Penerimaan resep'),
(15, '2023-05-30', 'Pencarian obat');
```

```sql
INSERT INTO obat_keluar (id_obat_keluar, tanggal, id_obat, jumlah)
VALUES
(1, '2023-05-02', 1, 10),
(2, '2023-05-04', 3, 5),
(3, '2023-05-06', 2, 7),
(4, '2023-05-08', 4, 3),
(5, '2023-05-10', 5, 2),
(6, '2023-05-12', 7, 4),
(7, '2023-05-15', 10, 1),
(8, '2023-05-16', 6, 2),
(9, '2023-05-18', 11, 3),
(10, '2023-05-20', 9, 5),
(11, '2023-05-22', 12, 2),
(12, '2023-05-24', 13, 1),
(13, '2023-05-26', 15, 4),
(14, '2023-05-28', 14, 6),
(15, '2023-05-30', 8, 3);

INSERT INTO penerimaan_barang (id_penerimaan_barang, tanggal, id_obat, jumlah, keterangan)
VALUES
(1, '2023-05-03', 1, 20, 'Penerimaan dari supplier A'),
(2, '2023-05-05', 2, 15, 'Penerimaan dari supplier B'),
(3, '2023-05-07', 3, 12, 'Penerimaan dari supplier C'),
(4, '2023-05-10', 4, 5, 'Penerimaan dari supplier D'),
(5, '2023-05-12', 5, 10, 'Penerimaan dari supplier E'),
(6, '2023-05-15', 6, 8, 'Penerimaan dari supplier F'),
(7, '2023-05-18', 7, 6, 'Penerimaan dari supplier G'),
(8, '2023-05-21', 8, 11, 'Penerimaan dari supplier H'),
(9, '2023-05-23', 9, 9, 'Penerimaan dari supplier I'),
(10, '2023-05-26', 10, 14, 'Penerimaan dari supplier J'),
(11, '2023-05-29', 11, 7, 'Penerimaan dari supplier K'),
(12, '2023-05-31', 12, 3, 'Penerimaan dari supplier L');

INSERT INTO penerimaan_resep (id_penerimaan_resep, tanggal, id_obat, jumlah, nama_pasien, nama_dokter)
VALUES
(1, '2023-05-01', 1, 30, 'Siti', 'Dr. Andi'),
(2, '2023-05-03', 2, 20, 'Agus', 'Dr. Budi'),
(3, '2023-05-05', 3, 15, 'Rina', 'Dr. Cici'),
(4, '2023-05-07', 4, 10, 'Joko', 'Dr. Didi'),
(5, '2023-05-09', 5, 5, 'Ayu', 'Dr. Eko'),
(6, '2023-05-11', 6, 12, 'Diana', 'Dr. Fifi'),
(7, '2023-05-13', 7, 8, 'Hendra', 'Dr. Gigi'),
(8, '2023-05-15', 8, 7, 'Rafi', 'Dr. Wiwik'),
(9, '2023-05-17', 9, 15, 'Budi', 'Dr. Hadi'),
(10, '2023-05-19', 10, 25, 'Ani', 'Dr. Indra'),
(11, '2023-05-21', 11, 18, 'Rudi', 'Dr. Joko'),
(12, '2023-05-23', 12, 6, 'Sari', 'Dr. Kiki')
```

1. Buatlah procedure tanpa menggunakan paraameter

```sql
DELIMITER //
CREATE PROCEDURE show_stok()
BEGIN
    SELECT * FROM sisa_stok_barang;
END //
DELIMITER ;
```

```
MariaDB [apotek]> CALL show_stok();
+---------+---------------+-----------+
| id_obat | nama_obat     | stok_obat |
+---------+---------------+-----------+
|       1 | Paracetamol   |        50 |
|       2 | Amoxicillin   |        21 |
|       3 | Loratadine    |        30 |
|       4 | Omeprazole    |        10 |
|       5 | Aspirin       |        40 |
|       6 | Metformin     |        25 |
|       7 | Atorvastatin  |        15 |
|       8 | Simvastatin   |        30 |
|       9 | Ciprofloxacin |        20 |
|      10 | Metronidazole |        35 |
|      11 | Azithromycin  |        25 |
|      12 | Diazepam      |        15 |
|      13 | Furosemide    |        20 |
|      14 | Ibuprofen     |        40 |
|      15 | Losartan      |        10 |
|      16 | Naproxen      |        30 |
|      17 | Prednisone    |        25 |
|      18 | Propranolol   |        20 |
|      19 | Sildenafil    |        10 |
|      20 | Tramadol      |        15 |
+---------+---------------+-----------+
20 rows in set (0.009 sec)

Query OK, 0 rows affected (0.010 sec)
```

2. Buatlah sebuah procedure menggunakan parameter IN

```
DELIMITER //
CREATE PROCEDURE add_stok_obat(IN input_id INT, IN input_nama
VARCHAR(255), IN input_stok INT)
BEGIN
    INSERT INTO sisa_stok_barang (id_obat, nama_obat, stok_obat)
    VALUES (input_id, input_nama, input_stok);
END //
DELIMITER ;
```

```
MariaDB [apotek]> CALL add_stok_obat(21, 'Bondrex', 7);
Query OK, 1 row affected (0.010 sec)

MariaDB [apotek]> CALL show_stok();
+---------+---------------+-----------+
| id_obat | nama_obat     | stok_obat |
+---------+---------------+-----------+
|       1 | Paracetamol   |        50 |
|       2 | Amoxicillin   |        21 |
|       3 | Loratadine    |        30 |
|       4 | Omeprazole    |        10 |
|       5 | Aspirin       |        40 |
|       6 | Metformin     |        25 |
|       7 | Atorvastatin  |        15 |
|       8 | Simvastatin   |        30 |
|       9 | Ciprofloxacin |        20 |
|      10 | Metronidazole |        35 |
|      11 | Azithromycin  |        25 |
|      12 | Diazepam      |        15 |
|      13 | Furosemide    |        20 |
|      14 | Ibuprofen     |        40 |
|      15 | Losartan      |        10 |
|      16 | Naproxen      |        30 |
|      17 | Prednisone    |        25 |
|      18 | Propranolol   |        20 |
|      19 | Sildenafil    |        10 |
|      20 | Tramadol      |        15 |
|      21 | Bondrex       |         7 |
+---------+---------------+-----------+
21 rows in set (0.001 sec)

Query OK, 0 rows affected (0.001 sec)
```

3. Buatlah sebuah procedure menggunakan parameter OUT

```
DELIMITER //
CREATE PROCEDURE show_jumlah_penerimaan_barang(IN input_tanggal DATE,
OUT out_jumlah INT)
BEGIN
    SELECT SUM(jumlah) INTO out_jumlah FROM penerimaan_barang WHERE
tanggal = input_tanggal;
END //
DELIMITER ;
```

```
MariaDB [apotek]> SET @jumlah_penerimaan = 0;
Query OK, 0 rows affected (0.000 sec)

MariaDB [apotek]>
MariaDB [apotek]> CALL show_jumlah_penerimaan_barang('2023-05-07', @jumlah_penerimaan);
Query OK, 1 row affected (0.000 sec)

MariaDB [apotek]>
MariaDB [apotek]> SELECT @jumlah_penerimaan;
+-------------------+
| @jumlah_penerimaan |
+-------------------+
|                12 |
+-------------------+
1 row in set (0.000 sec)

MariaDB [apotek]>
```

4. Buatlah sebuah procedure menggunakan parameter INOUT

```
DELIMITER //
CREATE PROCEDURE kali(INOUT angka INT)
BEGIN
    SELECT (angka * angka) INTO angka;
END //

DELIMITER ;
```

```
MariaDB [apotek]> SET @angka = 5;
Query OK, 0 rows affected (0.000 sec)

MariaDB [apotek]> CALL kali(@angka);
Query OK, 1 row affected (0.000 sec)

MariaDB [apotek]> SELECT @angka;
+--------+
| @angka |
+--------+
|     25 |
+--------+
1 row in set (0.000 sec)

MariaDB [apotek]>
```

1. Buatlah progam function dengan menggunakan count

```
SELECT COUNT(nama_obat) FROM sisa_stok_barang;
```

```
MariaDB [apotek]> SELECT COUNT(nama_obat) FROM sisa_stok_barang;
+-----------------+
| COUNT(nama_obat) |
+-----------------+
|              21 |
+-----------------+
1 row in set (0.007 sec)

MariaDB [apotek]>
```

2. Buatlah progam function dengan menggunakan max

```
SELECT nama_obat, MAX(stok_obat) FROM sisa_stok_barang;
```

```
MariaDB [apotek]> SELECT nama_obat, MAX(stok_obat) FROM sisa_stok_barang;
+------------+---------------+
| nama_obat  | MAX(stok_obat) |
+------------+---------------+
| Paracetamol |            50 |
+------------+---------------+
1 row in set (0.007 sec)

MariaDB [apotek]>
```

3. Buatlah progam function dengan menggunakan min

```
SELECT nama_obat, MIN(stok_obat) FROM sisa_stok_barang;
```

```
MariaDB [apotek]> SELECT nama_obat, MIN(stok_obat) FROM sisa_stok_barang;
+------------+---------------+
| nama_obat  | MIN(stok_obat) |
+------------+---------------+
| Paracetamol |             7 |
+------------+---------------+
1 row in set (0.000 sec)

MariaDB [apotek]>
```

4. Buatlah progam function dengan menggunakan average

```
SELECT AVG(stok_obat) FROM sisa_stok_barang;
```

```
MariaDB [apotek]> SELECT AVG(stok_obat) FROM sisa_stok_barang;
+----------------+
| AVG(stok_obat) |
+----------------+
|        23.4762 |
+----------------+
1 row in set (0.000 sec)
```

5. Buatlah progam function dengan menggunakan sum

```
SELECT SUM(stok_obat) FROM sisa_stok_barang;
```

```
MariaDB [apotek]> SELECT SUM(stok_obat) FROM sisa_stok_barang;
+----------------+
| SUM(stok_obat) |
+----------------+
|            493 |
+----------------+
1 row in set (0.000 sec)
```