Nama : Fajar Muslim
ID : GBE01058

Pada dokumen ini terdapat beberapa section utama yaitu:
1. Table customer
2. Table orders
3. Table order_details
4. Hasil query ke database sesuai homework yang diberikan

1. Table customer

Membuat table customers

```
mysql> CREATE TABLE customers (
    -> id INT NOT NULL PRIMARY KEY AUTO_INCREMENT,
    -> name CHAR(50) NOT NULL,
    -> phone CHAR(20) NOT NULL);
Query OK, 0 rows affected (0,04 sec)
```

Table customers telah berhasil ditambahkan

```
mysql> SHOW TABLES;
+-----------------------+
| Tables_in_food_oms_db |
+-----------------------+
| categories            |
| customers             |
| item_categories       |
| items                 |
+-----------------------+
4 rows in set (0,00 sec)
```

Table customers yang terbuat sesuai dengan command yang dijalankan

```
mysql> DESCRIBE customers;
+-------+----------+------+-----+---------+----------------+
| Field | Type     | Null | Key | Default | Extra          |
+-------+----------+------+-----+---------+----------------+
| id    | int      | NO   | PRI | NULL    | auto_increment |
| name  | char(50) | NO   |     | NULL    |                |
| phone | char(20) | NO   |     | NULL    |                |
+-------+----------+------+-----+---------+----------------+
3 rows in set (0,01 sec)
```

Mengisi table customers

```
mysql> INSERT INTO customers (name, phone) VALUES
    -> ("Budiawan", 80123123123),
    -> ("Mary Jones", 81123123123),
    -> ("Bima", 82123123123),
    -> ("Janaka", 83123123123),
    -> ("Sadewa", 84123123123);
Query OK, 5 rows affected (0,01 sec)
Records: 5  Duplicates: 0  Warnings: 0
```

Data berhasil dimasukkan ke table customer

```
mysql> SELECT * FROM customers;
+----+------------+-------------+
| id | name       | phone       |
+----+------------+-------------+
|  1 | Budiawan   | 80123123123 |
|  2 | Mary Jones | 81123123123 |
|  3 | Bima       | 82123123123 |
|  4 | Janaka     | 83123123123 |
|  5 | Sadewa     | 84123123123 |
+----+------------+-------------+
5 rows in set (0,01 sec)
```

2. Table orders

Membuat table orders

```
mysql> CREATE TABLE orders (
    -> id INT NOT NULL PRIMARY KEY AUTO_INCREMENT,
    -> user_id INT NOT NULL,
    -> order_date DATETIME NOT NULL,
    -> total_price INT NOT NULL
    -> );
Query OK, 0 rows affected (0,04 sec)
```

Table orders telah berhasil ditambahkan

```
mysql> SHOW TABLES;
+---------------------+
| Tables_in_food_oms_db |
+---------------------+
| categories          |
| customers           |
| item_categories     |
| items               |
| orders              |
+---------------------+
5 rows in set (0,00 sec)
```

Table orders yang terbuat sesuai dengan command yang dijalankan

```
mysql> DESCRIBE orders;
+-------------+----------+------+-----+---------+----------------+
| Field       | Type     | Null | Key | Default | Extra          |
+-------------+----------+------+-----+---------+----------------+
| id          | int      | NO   | PRI | NULL    | auto_increment |
| user_id     | int      | NO   |     | NULL    |                |
| order_date  | datetime | NO   |     | NULL    |                |
| total_price | int      | NO   |     | NULL    |                |
+-------------+----------+------+-----+---------+----------------+
4 rows in set (0,01 sec)
```

Menambahkan constraint foreign key pada table orders

```
mysql> ALTER TABLE orders ADD FOREIGN KEY (user_id) REFERENCES customers(id);
Query OK, 0 rows affected (0,08 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

Foreign key berhasil ditambahkan pada table orders

```
mysql> DESCRIBE orders;
+-------------+----------+------+-----+---------+----------------+
| Field       | Type     | Null | Key | Default | Extra          |
+-------------+----------+------+-----+---------+----------------+
| id          | int      | NO   | PRI | NULL    | auto_increment |
| user_id     | int      | NO   | MUL | NULL    |                |
| order_date  | datetime | NO   |     | NULL    |                |
| total_price | int      | NO   |     | NULL    |                |
+-------------+----------+------+-----+---------+----------------+
4 rows in set (0,00 sec)
```

Mengisi table orders

```
mysql> INSERT INTO orders (user_id, order_date, total_price) VALUES
    -> (1,"2021-07-01 1:01:01",52000),
    -> (1,"2021-07-01 2:02:02",71000),
    -> (2,"2021-07-01 3:03:03",72000),
    -> (2,"2021-07-01 4:04:04",15000),
    -> (3,"2021-07-01 5:05:05",76000);
Query OK, 5 rows affected (0,00 sec)
Records: 5  Duplicates: 0  Warnings: 0
```

Data berhasil dimasukkan ke table orders

```
mysql> SELECT * FROM orders;
+----+---------+---------------------+-------------+
| id | user_id | order_date          | total_price |
+----+---------+---------------------+-------------+
|  1 |       1 | 2021-07-01 01:01:01 |       52000 |
|  2 |       1 | 2021-07-01 02:02:02 |       71000 |
|  3 |       2 | 2021-07-01 03:03:03 |       72000 |
|  4 |       2 | 2021-07-01 04:04:04 |       15000 |
|  5 |       3 | 2021-07-01 05:05:05 |       76000 |
+----+---------+---------------------+-------------+
5 rows in set (0,00 sec)
```

3. Table order_details

Membuat table order_details

```
mysql> CREATE TABLE order_details (
    -> order_id INT NOT NULL,
    -> item_id INT NOT NULL,
    -> quantity INT NOT NULL
    -> );
Query OK, 0 rows affected (0,04 sec)
```

Table order_details telah berhasil ditambahkan

```
mysql> SHOW TABLES;
+---------------------+
| Tables_in_food_oms_db |
+---------------------+
| categories          |
| customers           |
| item_categories     |
| items               |
| order_details       |
| orders              |
+---------------------+
6 rows in set (0,00 sec)
```

Table order_details yang terbuat sesuai dengan command yang dijalankan

```
mysql> DESCRIBE order_details;
+----------+------+------+-----+---------+-------+
| Field    | Type | Null | Key | Default | Extra |
+----------+------+------+-----+---------+-------+
| order_id | int  | NO   |     | NULL    |       |
| item_id  | int  | NO   |     | NULL    |       |
| quantity | int  | NO   |     | NULL    |       |
+----------+------+------+-----+---------+-------+
3 rows in set (0,00 sec)
```

Menambahkan constraint foreign key pada table order_details

```
mysql> ALTER TABLE order_details ADD FOREIGN KEY (item_id) REFERENCES items(id);
Query OK, 0 rows affected (0,07 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> ALTER TABLE order_details ADD FOREIGN KEY (order_id) REFERENCES orders(id);
Query OK, 0 rows affected (0,10 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

Foreign key berhasil ditambahkan pada table order_details

```
mysql> DESCRIBE order_details;
+----------+------+------+-----+---------+-------+
| Field    | Type | Null | Key | Default | Extra |
+----------+------+------+-----+---------+-------+
| order_id | int  | NO   | MUL | NULL    |       |
| item_id  | int  | NO   | MUL | NULL    |       |
| quantity | int  | NO   |     | NULL    |       |
+----------+------+------+-----+---------+-------+
3 rows in set (0,00 sec)
```

Mengisi table order_details

```
mysql> INSERT INTO order_details (order_id, item_id, quantity) VALUES
    -> (1,1,2),
    -> (1,2,1),
    -> (2,4,1),
    -> (2,3,1),
    -> (2,6,1),
    -> (3,7,2),
    -> (4,5,1),
    -> (5,8,2),
    -> (5,4,2);
Query OK, 9 rows affected (0,01 sec)
Records: 9  Duplicates: 0  Warnings: 0
```

Data berhasil dimasukkan ke table order_details

```
mysql> SELECT * FROM order_details;
+----------+---------+----------+
| order_id | item_id | quantity |
+----------+---------+----------+
|        1 |       1 |        2 |
|        1 |       2 |        1 |
|        2 |       4 |        1 |
|        2 |       3 |        1 |
|        2 |       6 |        1 |
|        3 |       7 |        2 |
|        4 |       5 |        1 |
|        5 |       8 |        2 |
|        5 |       4 |        2 |
+----------+---------+----------+
9 rows in set (0,00 sec)
```

4. Hasil query ke database sesuai homework yang diberikan

Query ke DB untuk menampilkan data sesuai homework

```
mysql> SELECT
    -> orders.id AS 'order id',
    -> orders.order_date AS 'order date',
    -> customers.name AS 'customer name',
    -> customers.phone AS 'customer phone',
    -> orders.total_price AS 'total',
    -> GROUP_CONCAT(items.name) AS 'items bought'
    -> FROM customers
    -> JOIN orders ON customers.id = orders.user_id
    -> JOIN order_details ON order_details.order_id = orders.id
    -> JOIN items ON order_details.item_id = items.id
    -> GROUP BY order_details.order_id;
+----------+---------------------+---------------+----------------+-------+------------------------------------------+
| order id | order date          | customer name | customer phone | total | items bought                             |
+----------+---------------------+---------------+----------------+-------+------------------------------------------+
|        1 | 2021-07-01 01:01:01 | Budiawan      | 80123123123    | 52000 | Nasi Goreng Gila,Ice Water               |
|        2 | 2021-07-01 02:02:02 | Budiawan      | 80123123123    | 71000 | Green Tea Latte,Spaghetti,Vanilla Ice Cream |
|        3 | 2021-07-01 03:03:03 | Mary Jones    | 81123123123    | 72000 | Cordon Blue                              |
|        4 | 2021-07-01 04:04:04 | Mary Jones    | 81123123123    | 15000 | Orange Juice                             |
|        5 | 2021-07-01 05:05:05 | Bima          | 82123123123    | 76000 | French Fries,Green Tea Latte             |
+----------+---------------------+---------------+----------------+-------+------------------------------------------+
5 rows in set (0,01 sec)
```