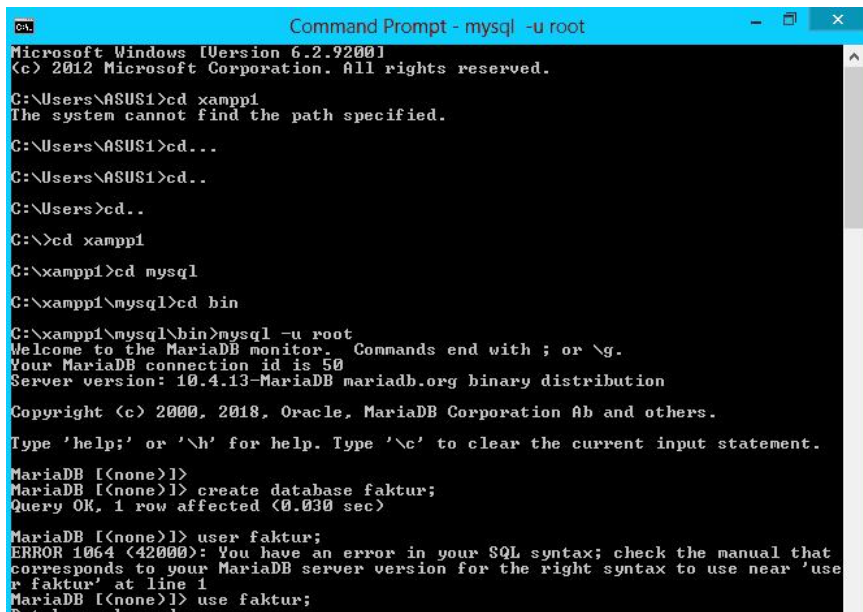


Nama : Haekal Hilmi Zain  
Npm : 1194017

## Merancang Database

1. Masuk ke dalam folder bin di dalam mysql, ketikan **mysql -u root** untuk mengakses mariadb, dan buat nama database



```
Command Prompt - mysql -u root
Microsoft Windows [Version 6.2.9200]
(c) 2012 Microsoft Corporation. All rights reserved.

C:\Users\ASUS1>cd xampp1
The system cannot find the path specified.

C:\Users\ASUS1>cd...
C:\Users\ASUS1>cd..
C:\Users>cd..
C:\>cd xampp1
C:\xampp1>cd mysql
C:\xampp1\mysql>cd bin
C:\xampp1\mysql\bin>mysql -u root
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 50
Server version: 10.4.13-MariaDB mariadb.org binary distribution

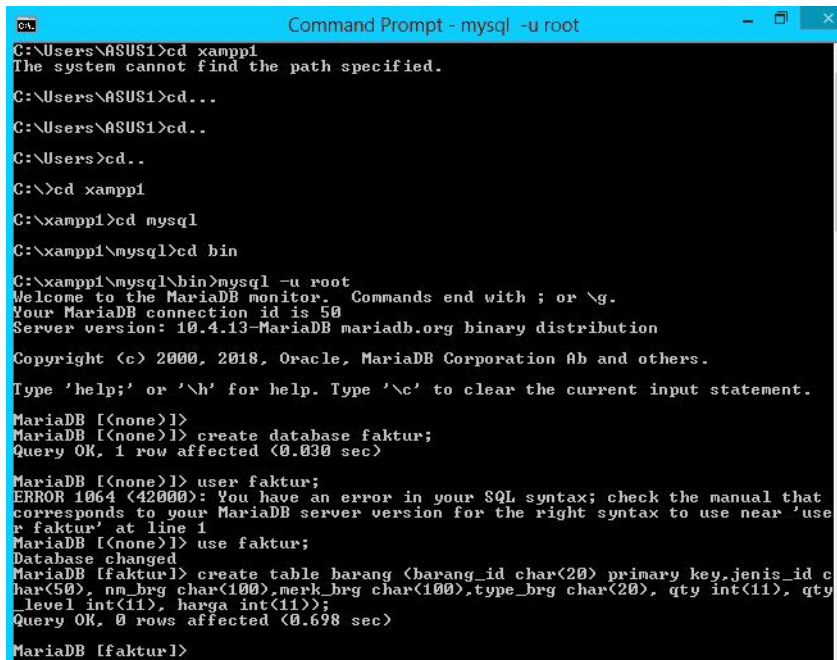
Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]>
MariaDB [(none)]> create database faktur;
Query OK, 1 row affected (0.030 sec)

MariaDB [(none)]> use faktur;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that
corresponds to your MariaDB server version for the right syntax to use near 'use
r faktur' at line 1
MariaDB [(none)]> use faktur;
Database changed
```

2. Create table barang



```
Command Prompt - mysql -u root
C:\Users\ASUS1>cd xampp1
The system cannot find the path specified.

C:\Users\ASUS1>cd...
C:\Users\ASUS1>cd..
C:\Users>cd..
C:\>cd xampp1
C:\xampp1>cd mysql
C:\xampp1\mysql>cd bin
C:\xampp1\mysql\bin>mysql -u root
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 50
Server version: 10.4.13-MariaDB mariadb.org binary distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]>
MariaDB [(none)]> create database faktur;
Query OK, 1 row affected (0.030 sec)

MariaDB [(none)]> use faktur;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that
corresponds to your MariaDB server version for the right syntax to use near 'use
r faktur' at line 1
MariaDB [(none)]> use faktur;
Database changed
MariaDB [faktur]> create table barang (barang_id char(20) primary key, jenis_id c
har(50), nm_brg char(100), merk_brg char(100), type_brg char(20), qty int(11), qty
_level int(11), harga int(11));
Query OK, 0 rows affected (0.698 sec)

MariaDB [faktur]>
```

Untuk melihat hasil nya ketikan **describe barang**;

```
MariaDB [faktur1]> desrcibe barang;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that
corresponds to your MariaDB server version for the right syntax to use near 'des
rcibe barang' at line 1
MariaDB [faktur1]> describe barang;
```

Field	Type	Null	Key	Default	Extra
barang_id	char(20)	NO	PRI	NULL	
jenis_id	char(50)	YES		NULL	
nm_brg	char(100)	YES		NULL	
merk_brg	char(100)	YES		NULL	
type_brg	char(20)	YES		NULL	
qty	int(11)	YES		NULL	
qty_level	int(11)	YES		NULL	
harga	int(11)	YES		NULL	

```
8 rows in set (0.031 sec)
MariaDB [faktur1]>
```

### 3. Create table jenis

Untuk membuat foreign key pada tabel jenis, relasikan tabel jenis dengan tabel barang menggunakan **CONSTRAINT barang\_id FOREIGN KEY ('barang\_id') REFERENCES 'barang' ('barang\_id')**,

```
Command Prompt - mysql -u root
```

Field	Type	Null	Key	Default	Extra
nm_brg	char(100)	YES		NULL	
merk_brg	char(100)	YES		NULL	
type_brg	char(20)	YES		NULL	
qty	int(11)	YES		NULL	
qty_level	int(11)	YES		NULL	
harga	int(11)	YES		NULL	

```
8 rows in set (0.002 sec)

MariaDB [faktur1] create table jenis (jenis_id int(4) primary key, barang_id ch
ar(20), CONSTRAINT barang_id FOREIGN KEY ('barang_id') REFERENCES 'barang' ('bar
ang_id'), jenis_barang char(100));
Query OK, 0 rows affected (0.628 sec)

MariaDB [faktur1] describe jenis;
```

Field	Type	Null	Key	Default	Extra
jenis_id	int(4)	NO	PRI	NULL	
barang_id	char(20)	YES	MUL	NULL	
jenis_barang	char(100)	YES		NULL	

```
3 rows in set (0.030 sec)
MariaDB [faktur1]>
```

### 4. Create table sales, dan check

```
Command Prompt - mysql -u root
```

Field	Type	Null	Key	Default	Extra
jenis_id	int(4)	NO	PRI	NULL	
barang_id	char(20)	YES	MUL	NULL	
jenis_barang	char(100)	YES		NULL	

```
3 rows in set (0.030 sec)

MariaDB [faktur1] create table sales (sales_id varchar(10) primary key, nama var
char(200), alamat tinytext);
Query OK, 0 rows affected (1.672 sec)

MariaDB [faktur1] describe sales;
```

Field	Type	Null	Key	Default	Extra
sales_id	varchar(10)	NO	PRI	NULL	
nama	varchar(200)	YES		NULL	
alamat	tinytext	YES		NULL	

```
3 rows in set (0.027 sec)
MariaDB [faktur1]>
```

5. Create tabel faktur, dan relasikan dengan tabel sales

```

C:\> Command Prompt - mysql -u root

MariaDB [faktur]> create table faktur (faktur_id varchar(200) primary key, tgl date, kon_id varchar(20), nb text, disc int(20), debit bigint(20), kredit bigint(20), tempo date, sales_id varchar(10), tgl_hyr date, retur bigint(20), CONSTRAINT sales_id FOREIGN KEY ('sales_id') REFERENCES 'sales' ('sales_id'));
Query OK, 0 rows affected (0.391 sec)

MariaDB [faktur]> describe faktur;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| faktur_id | varchar(200) | NO | PRI | NULL | |
| tgl | date | YES | | NULL | |
| kon_id | varchar(20) | YES | | NULL | |
| nb | text | YES | | NULL | |
| disc | int(20) | YES | | NULL | |
| debit | bigint(20) | YES | | NULL | |
| kredit | bigint(20) | YES | | NULL | |
| tempo | date | YES | | NULL | |
| sales_id | varchar(10) | YES | MUL | NULL | |
| tgl_hyr | date | YES | | NULL | |
| retur | bigint(20) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
11 rows in set (0.004 sec)

MariaDB [faktur]>

```

6. Create tabel supplier

```

C:\> Command Prompt - mysql -u root

MariaDB [faktur]> describe faktur;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| faktur_id | varchar(200) | NO | PRI | NULL | |
| tgl | date | YES | | NULL | |
| kon_id | varchar(20) | YES | | NULL | |
| nb | text | YES | | NULL | |
| disc | int(20) | YES | | NULL | |
| debit | bigint(20) | YES | | NULL | |
| kredit | bigint(20) | YES | | NULL | |
| tempo | date | YES | | NULL | |
| sales_id | varchar(10) | YES | MUL | NULL | |
| tgl_hyr | date | YES | | NULL | |
| retur | bigint(20) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
11 rows in set (0.004 sec)

MariaDB [faktur]> create table supplier (ID char(20) primary key, nama char(200), alamat char(200), kota char(100));
Query OK, 0 rows affected (0.270 sec)

MariaDB [faktur]> describe supplier;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| ID | char(20) | NO | PRI | NULL | |
| nama | char(200) | YES | | NULL | |
| alamat | char(200) | YES | | NULL | |
| kota | char(100) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.002 sec)

MariaDB [faktur]>

```

7. Create tabel faktur\_beli

```

C:\> Command Prompt - mysql -u root

MariaDB [faktur]> describe faktur;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| faktur_id | varchar(200) | NO | PRI | NULL | |
| tgl | date | YES | | NULL | |
| kon_id | varchar(20) | YES | | NULL | |
| nb | text | YES | | NULL | |
| disc | int(20) | YES | | NULL | |
| debit | bigint(20) | YES | | NULL | |
| kredit | bigint(20) | YES | | NULL | |
| tempo | date | YES | | NULL | |
| sales_id | varchar(10) | YES | MUL | NULL | |
| tgl_hyr | date | YES | | NULL | |
| retur | bigint(20) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
11 rows in set (0.004 sec)

MariaDB [faktur]> create table faktur_beli (faktur_id varchar(200) primary key, tgl date, sup_id varchar(20), nb text, disc int(20), debit bigint(20), kredit bigint(20), tempo date, tgl_hyr date, retur bigint(20));
Query OK, 0 rows affected (0.274 sec)

MariaDB [faktur]> describe faktur_beli;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| faktur_id | varchar(200) | NO | PRI | NULL | |
| tgl | date | YES | | NULL | |
| sup_id | varchar(20) | YES | | NULL | |
| nb | text | YES | | NULL | |
| disc | int(20) | YES | | NULL | |
| debit | bigint(20) | YES | | NULL | |
| kredit | bigint(20) | YES | | NULL | |
| tempo | date | YES | | NULL | |
| tgl_hyr | date | YES | | NULL | |
| retur | bigint(20) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
10 rows in set (0.033 sec)

MariaDB [faktur]>

```

## 8. Create tabel pembelian

```

Command Prompt - mysql -u root

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that
corresponds to your MariaDB server version for the right syntax to use near '->u
nsigned()' at line 1
MariaDB [faktur1] create table pembelian (faktur_id char(20), brg_id char(20), q
ty int(20), disc float, discrp int(20), harga bigint(20), CONSTRAINT barang_id F
OREIGN KEY ('barang_id') REFERENCES 'barang' ('barang_id'));
ERROR 1072 (42000): Key column 'barang_id' doesn't exist in table
MariaDB [faktur1] create table pembelian (faktur_id char(20), brg_id char(20), q
ty int(20), disc float, discrp int(20), harga bigint(20));
Query OK, 0 rows affected (0.427 sec)

MariaDB [faktur1] describe pembelian;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| faktur_id | char(20) | YES | | NULL | |
| brg_id | char(20) | YES | | NULL | |
| qty | int(20) | YES | | NULL | |
| disc | float | YES | | NULL | |
| discrp | int(20) | YES | | NULL | |
| harga | bigint(20) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.056 sec)

MariaDB [faktur1]

```

## 9. Create tabel konsumen

```

Command Prompt - mysql -u root

+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| faktur_id | char(20) | YES | | NULL | |
| brg_id | char(20) | YES | | NULL | |
| qty | int(20) | YES | | NULL | |
| disc | float | YES | | NULL | |
| discrp | int(20) | YES | | NULL | |
| harga | bigint(20) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.056 sec)

MariaDB [faktur1] create table konsumen (ID char(50) unique key, nama char(100)
, alamat char(200), kota char(100), npwp varchar(200));
Query OK, 0 rows affected (0.371 sec)

MariaDB [faktur1] describe konsumen;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| ID | char(50) | YES | UNI | NULL | |
| nama | char(100) | YES | | NULL | |
| alamat | char(200) | YES | | NULL | |
| kota | char(100) | YES | | NULL | |
| npwp | varchar(200) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+

```

## 10. Create tabel faktur\_retur

```

Command Prompt - mysql -u root

+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| nama | char(100) | YES | | NULL | |
| alamat | char(200) | YES | | NULL | |
| kota | char(100) | YES | | NULL | |
| npwp | varchar(200) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.003 sec)

MariaDB [faktur1] create table faktur_retur (faktur_id varchar(200) primary key,
kon_id varchar(200), tgl date, nb text, disc int(20), retur int(20));
Query OK, 0 rows affected (0.237 sec)

MariaDB [faktur1] describe faktur_retur;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| faktur_id | varchar(200) | NO | PRI | NULL | |
| kon_id | varchar(200) | YES | | NULL | |
| tgl | date | YES | | NULL | |
| nb | text | YES | | NULL | |
| disc | int(20) | YES | | NULL | |
| retur | int(20) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.031 sec)

MariaDB [faktur1]

```



## 11. Create tabel penjualan

```

C:\> mysql -u root

MariaDB [faktur1] > show tables;
+-----+
| tables_in_faktur1 |
+-----+
| tempo            |
| sales_id         |
| tgl_byr          |
| retur            |
+-----+
11 rows in set (0.002 sec)

MariaDB [faktur1] > create table penjualan ( faktur_id char(20), brg_id char(20),
qty int(20), disc float, discrp int(20), harga bigint(20));
Query OK, 0 rows affected (0.238 sec)

MariaDB [faktur1] > describe penjualan;
+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+
| faktur_id  | char(20)      | YES  |     | NULL    |       |
| brg_id     | char(20)      | YES  |     | NULL    |       |
| qty        | int(20)       | YES  |     | NULL    |       |
| disc       | float         | YES  |     | NULL    |       |
| discrp     | int(20)       | YES  |     | NULL    |       |
| harga      | bigint(20)    | YES  |     | NULL    |       |
+-----+
6 rows in set (0.002 sec)

MariaDB [faktur1] >

```

## 12. Create tabel faktur\_mutasi

```

C:\> mysql -u root

MariaDB [faktur1] > show tables;
+-----+
| tables_in_faktur1 |
+-----+
| faktur_mutasi     |
| faktur_penjualan  |
| retur_penjualan   |
| tempo             |
| sales_id          |
| tgl_byr           |
| retur            |
+-----+
7 rows in set (0.002 sec)

MariaDB [faktur1] > create table faktur_mutasi (faktur_id varchar(200) primary key,
tgl date, nb text, debit bigint(20), kon_id char(50));
Query OK, 0 rows affected (0.402 sec)

MariaDB [faktur1] > describe faktur_mutasi;
+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+
| faktur_id  | varchar(200)  | NO   | PRI | NULL    |       |
| tgl        | date          | YES  |     | NULL    |       |
| nb         | text          | YES  |     | NULL    |       |
| debit      | bigint(20)    | YES  |     | NULL    |       |
| kon_id     | char(50)      | YES  |     | NULL    |       |
+-----+
5 rows in set (0.002 sec)

MariaDB [faktur1] >

```

## 13. Create tabel retur penjualan

```

C:\> mysql -u root

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that
corresponds to your MariaDB server version for the right syntax to use near 'cre
ate table retur_penjualan (faktur_id char(20), brg_id char(20), qty int(20...' a
t line 1
MariaDB [faktur1] >
MariaDB [faktur1] > update table retur_penjualan (faktur_id char(20), barang_id ch
ar(20), qty int(20), disc float, discrp int(20), harga bigint(20));
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that
corresponds to your MariaDB server version for the right syntax to use near 'tab
le retur_penjualan (faktur_id char(20), barang_id char(20), qty int(20), d...' a
t line 1
MariaDB [faktur1] > describe retur_penjualan;
+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+
| faktur_id  | char(20)      | YES  |     | NULL    |       |
| brg_id     | char(20)      | YES  |     | NULL    |       |
| qty        | int(20)       | YES  |     | NULL    |       |
| disc       | float         | YES  |     | NULL    |       |
| discrp     | int(20)       | YES  |     | NULL    |       |
| harga      | bigint(20)    | YES  |     | NULL    |       |
+-----+
6 rows in set (0.002 sec)

MariaDB [faktur1] >

```

#### 14. Create tabel mutasi

```
Command Prompt - mysql -u root

MariaDB [faktur]> create table mutasi (faktur_id char(20), brg_id char(20) iniqu
ue key, qty int(20));
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that
corresponds to your MariaDB server version for the right syntax to use near 'key
, qty int(20))' at line 1
MariaDB [faktur]> create table mutasi (faktur_id char(20), brg_id char(20) iniqu
e key, qty int(20));
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that
corresponds to your MariaDB server version for the right syntax to use near 'key
, qty int(20))' at line 1
MariaDB [faktur]> create table mutasi (faktur_id char(20), brg_id char(20) unique
key, qty int(20));
Query OK, 0 rows affected (0.326 sec)

MariaDB [faktur]> describe mutasi;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| faktur_id  | char(20)  | YES  |     | NULL    |       |
| brg_id     | char(20)  | YES  | UNI | NULL    |       |
| qty        | int(20)   | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.002 sec)

MariaDB [faktur]>
```

#### 15. Ini adalah tabel-tabel yang sudah dibuat sebelumnya

```
Command Prompt - mysql -u root

+-----+-----+-----+-----+-----+
| qty      | int(20)   | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+
3 rows in set (0.002 sec)

MariaDB [faktur]> show tables;
+-----+
| Tables_in_faktur |
+-----+
| barang           |
| faktur           |
| faktur_beli      |
| faktur_mutasi    |
| faktur_retur     |
| jenis            |
| konsumen         |
| mutasi           |
| pembelian        |
| penjualan        |
| retur_penjualan  |
| sales            |
| supplier         |
+-----+
13 rows in set (0.040 sec)

MariaDB [faktur]>
```

16. Kemudian lanjut ke Phpmyadmin, masuk ke database yang telah dibuat dan buat relasinya

