LAPORAN AWAL
BASIS DATA

LAPORAN KE-6

Disusun Oleh :

Nama :Febiyanto Rizki Qurbandi

NIM :231011450284

Kelas :04TPLP003

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TUGAS PRAKTIKUM

a) Buatlah Struktur Database penjualan dan buku sebagai table

Ketik perintah di bawah ini

```
mysql>create database Penjualan;
mysql>use Penjualan;
mysql>create table buku(isbn varchar(15) , judul char(20),pengarang char(30), harga
varchar (15),stok char (10) ,primary key(isbn));
mysql>desc buku;
```

```
Database changed
MariaDB [penjualan]> show tables;
+---------------------+
| Tables_in_penjualan |
+---------------------+
| barang              |
| buku                |
| suplier             |
+---------------------+
3 rows in set (0.000 sec)

MariaDB [penjualan]> CREATE TABLE buku_2 (
    ->   isbn VARCHAR(15),
    ->   judul CHAR(20),
    ->   pengarang CHAR(30),
    ->   harga VARCHAR(15),
    ->   stok CHAR(10),
    ->   PRIMARY KEY(isbn)
    -> );
Query OK, 0 rows affected (0.017 sec)

MariaDB [penjualan]> desc buku_2;
+-----------+-------------+------+-----+---------+-------+
| Field     | Type        | Null | Key | Default | Extra |
+-----------+-------------+------+-----+---------+-------+
| isbn      | varchar(15) | NO   | PRI | NULL    |       |
| judul     | char(20)    | YES  |     | NULL    |       |
| pengarang | char(30)    | YES  |     | NULL    |       |
| harga     | varchar(15) | YES  |     | NULL    |       |
| stok      | char(10)    | YES  |     | NULL    |       |
+-----------+-------------+------+-----+---------+-------+
5 rows in set (0.001 sec)

MariaDB [penjualan]> SELECT
    ->   'Febiyanto Rizki Qurbandi' AS Nama,
    ->   '231011450284' AS NIM,
    ->   '04TPLP003' AS Kelas,
    ->   'Basis Data' AS Mata_Kuliah;
+--------------------------+--------------+-----------+-------------+
| Nama                     | NIM          | Kelas     | Mata_Kuliah |
+--------------------------+--------------+-----------+-------------+
| Febiyanto Rizki Qurbandi | 231011450284 | 04TPLP003 | Basis Data  |
+--------------------------+--------------+-----------+-------------+
1 row in set (0.000 sec)
```

b) Dari point a) di atas, tambahkan data sebagai berikut:

Ketik perintah di bawah ini

```
mysql>INSERT INTO buku values('11231','Matematika Diskrit','Hanafi',
'60000','25');
mysql>INSERT INTO buku values ('11232','Pintar Java','Median' ,'50000','20');
mysql>INSERT INTO buku values('11233','Struktur Data','Andrianto','70000','15');mysql>INSERT
INTO buku values ('11234','Algoritma','SintaSari','45000','16');
mysql>INSERT INTO buku values('11235','Kewarganegaraan','Ramdani','64000'
,'22');
mysql>INSERT INTO buku values ('11236','Basisdata','Suginanto','46000' ,'33'); mysql>INSERT
INTO buku values ('11237','Sistem Berkas,'Suginanto','60000' ,'20'); mysql>INSERT
INTO buku values ('11238','Web PHP','Median','50000' ,'25');
```

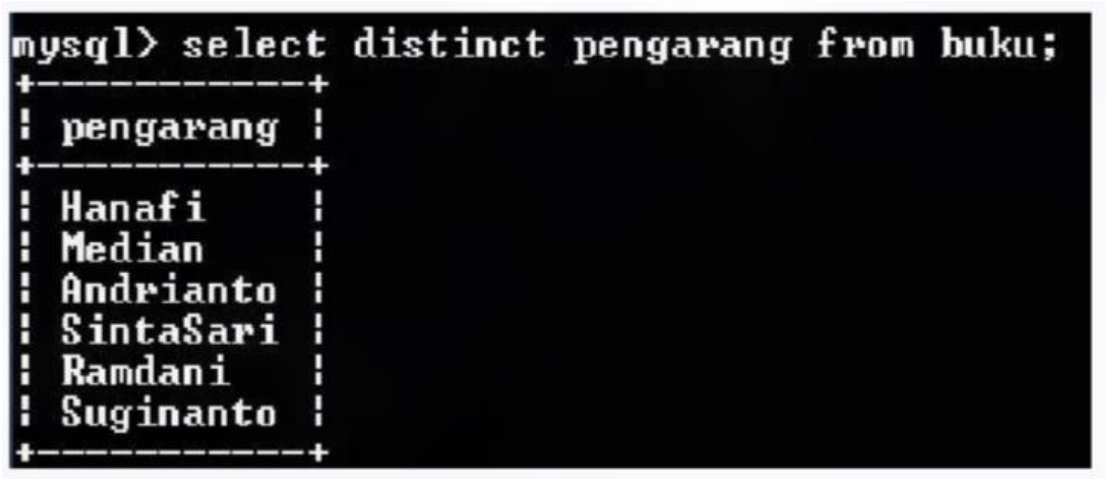
```
MariaDB [penjualan]> INSERT INTO buku_2 VALUES ('11231', 'Matematika Diskrit', 'Hanafi', '60000', '25');
Query OK, 1 row affected (0.010 sec)

MariaDB [penjualan]> INSERT INTO buku_2 VALUES ('11232', 'Pintar Java', 'Median', '50000', '20');
Query OK, 1 row affected (0.001 sec)

MariaDB [penjualan]> INSERT INTO buku_2 VALUES ('11233', 'Struktur Data', 'Andrianto', '70000', '15');
Query OK, 1 row affected (0.002 sec)

MariaDB [penjualan]> INSERT INTO buku_2 VALUES ('11234', 'Algoritma', 'SintaSari', '45000', '16');
Query OK, 1 row affected (0.001 sec)

MariaDB [penjualan]> INSERT INTO buku_2 VALUES ('11235', 'Kewarganegaraan', 'Ramdani', '64000', '22');
Query OK, 1 row affected (0.001 sec)

MariaDB [penjualan]> INSERT INTO buku_2 VALUES ('11236', 'Basisdata', 'Suginanto', '46000', '33');
Query OK, 1 row affected (0.001 sec)

MariaDB [penjualan]> INSERT INTO buku_2 VALUES ('11237', 'Sistem Berkas', 'Suginanto', '60000', '20');
Query OK, 1 row affected (0.001 sec)

MariaDB [penjualan]> INSERT INTO buku_2 VALUES ('11238', 'Web PHP', 'Median', '50000', '25');
Query OK, 1 row affected (0.010 sec)

MariaDB [penjualan]> select * from buku_2;
+-------+--------------------+-----------+-------+------+
| isbn  | judul              | pengarang | harga | stok |
+-------+--------------------+-----------+-------+------+
| 11231 | Matematika Diskrit | Hanafi    | 60000 | 25   |
| 11232 | Pintar Java        | Median    | 50000 | 20   |
| 11233 | Struktur Data      | Andrianto | 70000 | 15   |
| 11234 | Algoritma          | SintaSari | 45000 | 16   |
| 11235 | Kewarganegaraan    | Ramdani   | 64000 | 22   |
| 11236 | Basisdata          | Suginanto | 46000 | 33   |
| 11237 | Sistem Berkas      | Suginanto | 60000 | 20   |
| 11238 | Web PHP            | Median    | 50000 | 25   |
+-------+--------------------+-----------+-------+------+
8 rows in set (0.000 sec)
```

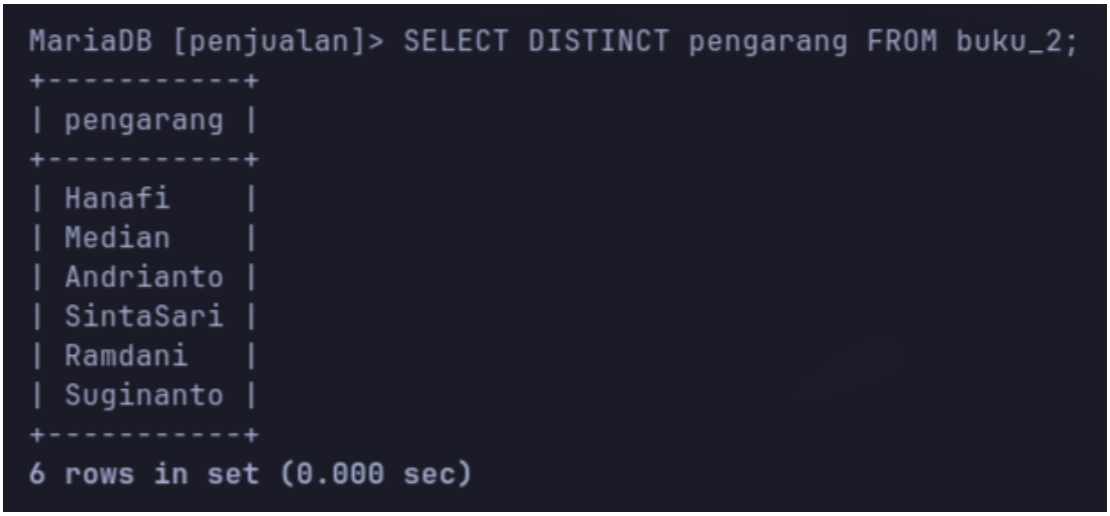
c) Dari point a) dan b) di atas, cari dan tampilkan data dengan perintah distinct

Ketik perintah di bawah ini

```
mysql>select distinct pengarang from buku;
```

Kemudian akan terlihat gambar di bawah ini





d) Dari point a) ,b) dan c) di atas, cari dan tampilkan data dengan perintah distinct untuk menampilkan data harga

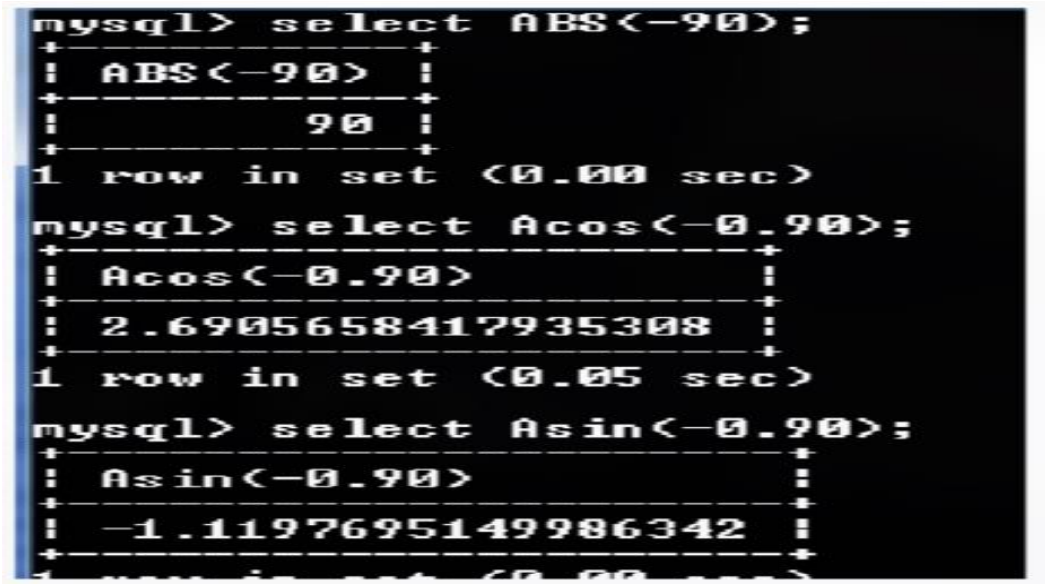
```
MariaDB [penjualan]> SELECT DISTINCT harga FROM buku_2;
+-------+
| harga |
+-------+
| 60000 |
| 50000 |
| 70000 |
| 45000 |
| 64000 |
| 46000 |
+-------+
6 rows in set (0.000 sec)

MariaDB [penjualan]> SELECT
    ->   'Febiyanto Rizki Qurbandi' AS Nama,
    ->   '231011450284' AS NIM,
    ->   '04TPLP003' AS Kelas,
    ->   'Basis Data' AS Mata_Kuliah;
+--------------------------+--------------+-----------+-------------+
| Nama                     | NIM          | Kelas     | Mata_Kuliah |
+--------------------------+--------------+-----------+-------------+
| Febiyanto Rizki Qurbandi | 231011450284 | 04TPLP003 | Basis Data  |
+--------------------------+--------------+-----------+-------------+
1 row in set (0.000 sec)

MariaDB [penjualan]>
```

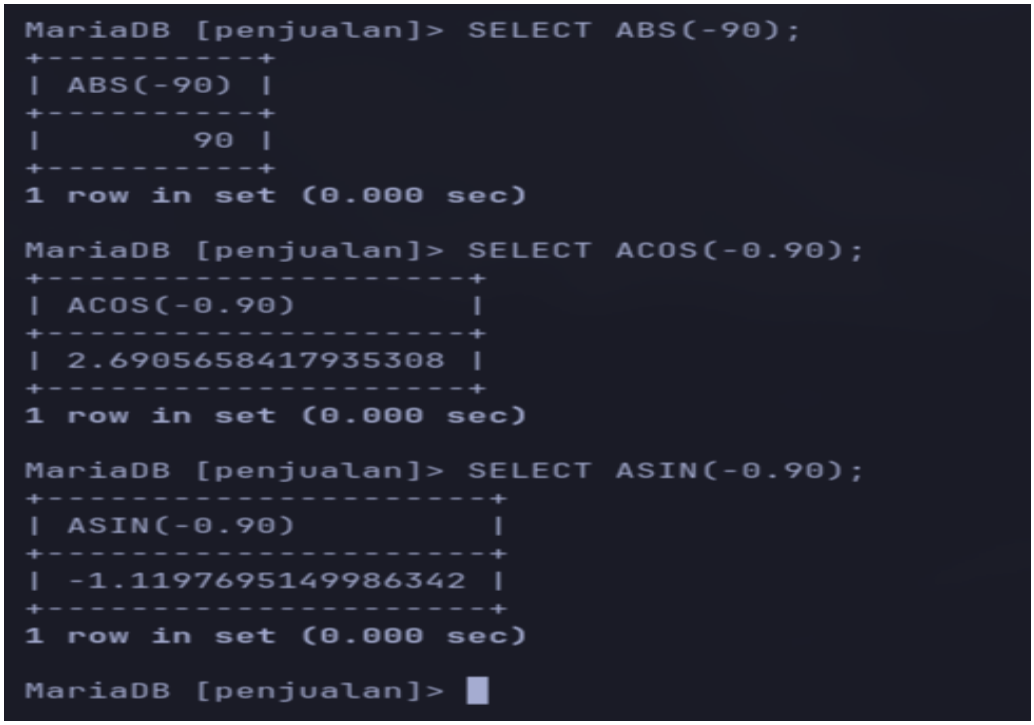
e) Untuk menampilkan data dengan Operator Aritmatika

Ketik perintah di bawah ini

```
mysql>select ABS(-90);
mysql>select  ACOS(-0.90);
mysql>select ASIN(-0.90);
```

Kemudian akan terlihat gambar di bawah ini

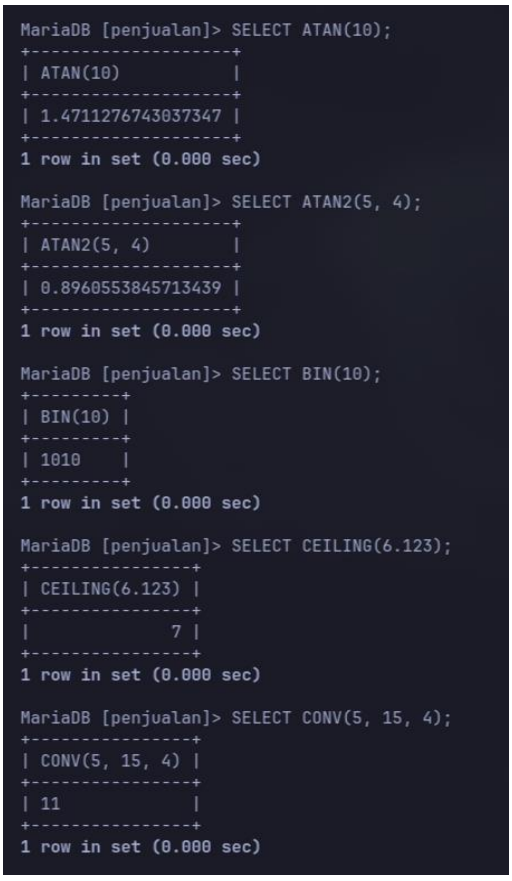




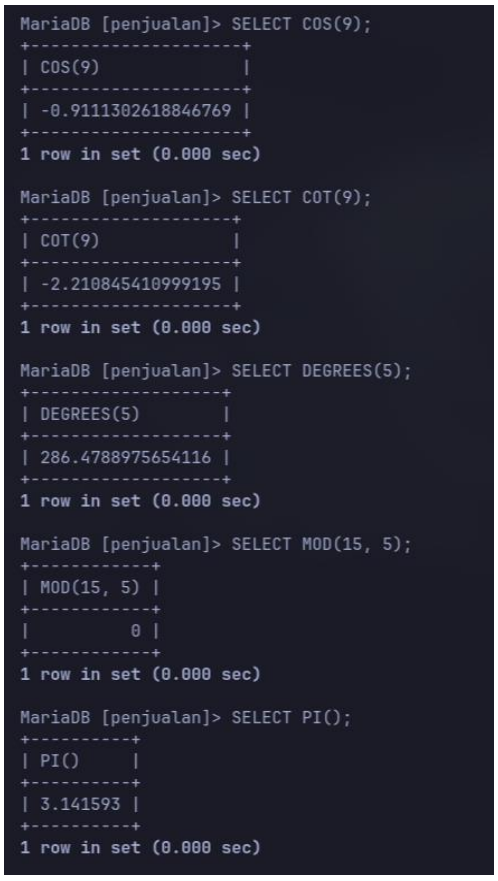
f) Dari point e) di atas, cari dan tampilkan data dengan perintah operator aritmatika

dan data sebagai berikut:

ATAN(10)	ATAN2(5, 4)	BIN(10)	CEILING(6.123)	CONV(5, 15, 4)
COS(9)	COT(9)	DEGREES(5)	MOD(15, 5)	PI();
RADIANS(150)	ROUND(6.43)	ROUND(5.4315, 3)	SIN(300)	TAN(150)
EXP(9)	FLOOR(8.98)	FORMAT(12345.67, 4)	GREATEST(9, 200, 344, 4, 3, 1)	HEX(15);
LEAST(15, 3, 0, 100, 355)	LOG(10)	LOG10(15)	OCT(18)	POW(5, 4)
RAND(180)	RAND(10)	SIGN(-5.5637)	SQRT(50)	TRUNCATE(1234.56789, 2)



```
MariaDB [penjualan]> SELECT ATAN(10);
+--------------------+
| ATAN(10)           |
+--------------------+
| 1.4711276743037347 |
+--------------------+
1 row in set (0.000 sec)

MariaDB [penjualan]> SELECT ATAN2(5, 4);
+--------------------+
| ATAN2(5, 4)        |
+--------------------+
| 0.8960553845713439 |
+--------------------+
1 row in set (0.000 sec)

MariaDB [penjualan]> SELECT BIN(10);
+---------+
| BIN(10) |
+---------+
| 1010    |
+---------+
1 row in set (0.000 sec)

MariaDB [penjualan]> SELECT CEILING(6.123);
+----------------+
| CEILING(6.123) |
+----------------+
|              7 |
+----------------+
1 row in set (0.000 sec)

MariaDB [penjualan]> SELECT CONV(5, 15, 4);
+----------------+
| CONV(5, 15, 4) |
+----------------+
| 11             |
+----------------+
1 row in set (0.000 sec)
```



```
MariaDB [penjualan]> SELECT COS(9);
+---------------------+
| COS(9)              |
+---------------------+
| -0.9111302618846769 |
+---------------------+
1 row in set (0.000 sec)

MariaDB [penjualan]> SELECT COT(9);
+--------------------+
| COT(9)             |
+--------------------+
| -2.210845410999195 |
+--------------------+
1 row in set (0.000 sec)

MariaDB [penjualan]> SELECT DEGREES(5);
+-------------------+
| DEGREES(5)        |
+-------------------+
| 286.4788975654116 |
+-------------------+
1 row in set (0.000 sec)

MariaDB [penjualan]> SELECT MOD(15, 5);
+------------+
| MOD(15, 5) |
+------------+
|          0 |
+------------+
1 row in set (0.000 sec)

MariaDB [penjualan]> SELECT PI();
+----------+
| PI()     |
+----------+
| 3.141593 |
+----------+
1 row in set (0.000 sec)
```

```
MariaDB [penjualan]> SELECT RADIANS(150);
+-------------------+
| RADIANS(150)      |
+-------------------+
| 2.6179938779914944 |
+-------------------+
1 row in set (0.000 sec)

MariaDB [penjualan]> SELECT EXP(9);
+------------------+
| EXP(9)           |
+------------------+
| 8103.083927575384 |
+------------------+
1 row in set (0.000 sec)

MariaDB [penjualan]> SELECT FLOOR(8.98);
+-------------+
| FLOOR(8.98) |
+-------------+
|           8 |
+-------------+
1 row in set (0.000 sec)

MariaDB [penjualan]> SELECT FORMAT(12345.67, 4);
+--------------------+
| FORMAT(12345.67, 4) |
+--------------------+
| 12,345.6700        |
+--------------------+
1 row in set (0.000 sec)

MariaDB [penjualan]> SELECT GREATEST(9, 200, 344, 4, 3, 1);
+------------------------------+
| GREATEST(9, 200, 344, 4, 3, 1) |
+------------------------------+
|                          344 |
+------------------------------+
1 row in set (0.000 sec)

MariaDB [penjualan]> SELECT HEX(15);
+---------+
| HEX(15) |
+---------+
| F       |
+---------+
1 row in set (0.000 sec)

MariaDB [penjualan]> SELECT LEAST(15, 3, 0, 100, 355);
+--------------------------+
| LEAST(15, 3, 0, 100, 355) |
+--------------------------+
|                        0 |
+--------------------------+
1 row in set (0.000 sec)
```

```
MariaDB [penjualan]> SELECT LOG(10);
+-------------------+
| LOG(10)           |
+-------------------+
| 2.302585092994046 |
+-------------------+
1 row in set (0.000 sec)

MariaDB [penjualan]> SELECT LOG10(15);
+--------------------+
| LOG10(15)          |
+--------------------+
| 1.1760912590556813 |
+--------------------+
1 row in set (0.000 sec)

MariaDB [penjualan]> SELECT OCT(18);
+---------+
| OCT(18) |
+---------+
| 22      |
+---------+
1 row in set (0.000 sec)

MariaDB [penjualan]> SELECT POW(5, 4);
+-----------+
| POW(5, 4) |
+-----------+
|       625 |
+-----------+
1 row in set (0.000 sec)

MariaDB [penjualan]> SELECT RAND(180);
+---------------------+
| RAND(180)           |
+---------------------+
| 0.18818008358420812 |
+---------------------+
1 row in set (0.000 sec)

MariaDB [penjualan]> SELECT ROUND(6.43);
+-------------+
| ROUND(6.43) |
+-------------+
|           6 |
+-------------+
1 row in set (0.000 sec)

MariaDB [penjualan]> SELECT RAND(10);
+--------------------+
| RAND(10)           |
+--------------------+
| 0.6570515219653505 |
+--------------------+
1 row in set (0.000 sec)
```

```
MariaDB [penjualan]> SELECT ROUND(5.4315, 3);
+------------------+
| ROUND(5.4315, 3) |
+------------------+
|            5.432 |
+------------------+
1 row in set (0.000 sec)

MariaDB [penjualan]> SELECT SIGN(-5.5637);
+---------------+
| SIGN(-5.5637) |
+---------------+
|            -1 |
+---------------+
1 row in set (0.000 sec)

MariaDB [penjualan]> SELECT SIN(300);
+---------------------+
| SIN(300)            |
+---------------------+
| -0.9997558399011495 |
+---------------------+
1 row in set (0.000 sec)

MariaDB [penjualan]> SELECT SQRT(50);
+--------------------+
| SQRT(50)           |
+--------------------+
| 7.0710678118654755 |
+--------------------+
1 row in set (0.000 sec)

MariaDB [penjualan]> SELECT TAN(150);
+---------------------+
| TAN(150)            |
+---------------------+
| -1.0223462354365875 |
+---------------------+
1 row in set (0.000 sec)

MariaDB [penjualan]> SELECT TRUNCATE(1234.56789, 2);
+--------------------------+
| TRUNCATE(1234.56789, 2) |
+--------------------------+
|                  1234.56 |
+--------------------------+
1 row in set (0.000 sec)
```

g) Dari point a) dan b) di atas, cari dan tampilkan data

Menampilkan data dengan fungsi Agregat untuk menampilkan jumlah data record pada tabel buku.

Ketik perintah di bawah ini

```
mysql>select count(*) from buku;
mysql>select count(*) from buku where harga= 60000;
```

Kemudian akan terlihat gambar di bawah ini

```
mysql> select count(*) from buku;
+----------+
| count(*) |
+----------+
|        8 |
+----------+
1 row in set (0.04 sec)

mysql> select count(*) from buku where harga= 60000;
+----------+
| count(*) |
+----------+
|        2 |
+----------+
```

```
MariaDB [penjualan]> SELECT COUNT(*) FROM buku_2;
+----------+
| COUNT(*) |
+----------+
|        8 |
+----------+
1 row in set (0.010 sec)

MariaDB [penjualan]> SELECT COUNT(*) FROM buku WHERE harga = 60000;
+----------+
| COUNT(*) |
+----------+
|        2 |
+----------+
1 row in set (0.000 sec)
```

h) Dari point a) dan b) di atas, cari dan tampilkan dengan fungsi Agregat untuk menampilkan nilai tertinggi, nilai terendah dan rata-rata dari seluruh harga buku

```
MariaDB [penjualan]> SELECT MAX(harga) FROM buku_2;
+-------------+
| MAX(harga) |
+-------------+
| 70000      |
+-------------+
1 row in set (0.000 sec)

MariaDB [penjualan]> SELECT MIN(harga) FROM buku_2;
+-------------+
| MIN(harga) |
+-------------+
| 45000      |
+-------------+
1 row in set (0.000 sec)

MariaDB [penjualan]> SELECT AVG(harga) FROM buku_2;
+-------------+
| AVG(harga) |
+-------------+
|      55625 |
+-------------+
1 row in set (0.000 sec)
```

i) Dari point a) dan b) di atas, cari dan tampilkan dengan fungsi Agregat untuk menampilkan total seluruh harga

Kemudian akan terlihat gambar di bawah ini


```
MariaDB [penjualan]> SELECT SUM(harga) FROM buku_2;
+------------+
| SUM(harga) |
+------------+
|     445000 |
+------------+
1 row in set (0.000 sec)

MariaDB [penjualan]>
```

j) Dari point a) dan b) di atas, cari dan tampilkan dengan fungsi Agregat untuk menampilkan total keseluruhan harga setelah harga buku dikalikan dengan stok buku terlebih dahulu.

Kemudian akan terlihat gambar di bawah ini


```
MariaDB [penjualan]> SELECT SUM(harga * stok) FROM buku_2;
+--------------------+
| SUM(harga * stok) |
+--------------------+
|           9646000 |
+--------------------+
1 row in set (0.000 sec)

MariaDB [penjualan]>
```