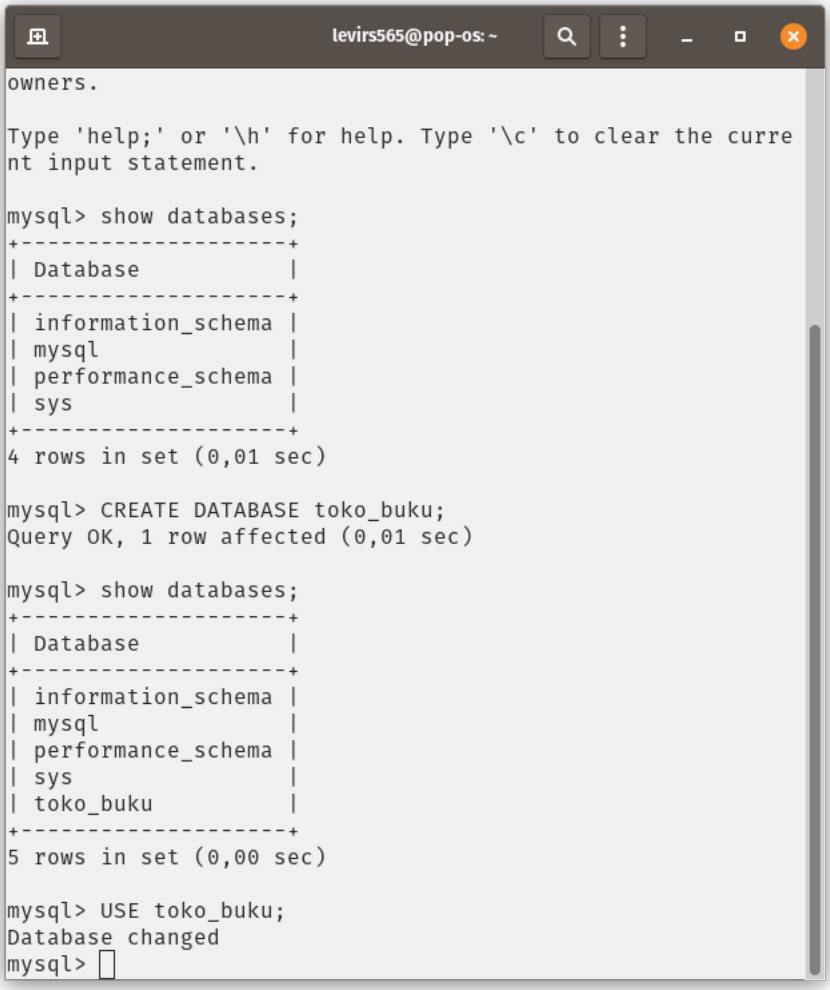
Nama : Levi Rizki Saputra
NIM : 123230127
Kelas : D

Create Database:




Query:

```
CREATE TABLE Buku(
Kode_buku CHAR(4) NOT NULL PRIMARY KEY,
Judul CHAR(20) NOT NULL,
Pengarang CHAR(15) NOT NULL,
Jml_buku INT NOT NULL,
Kode_penerbit CHAR(2) NOT NULL,
Harga_Sebulan INT NOT NULL
);
```

Hasil:

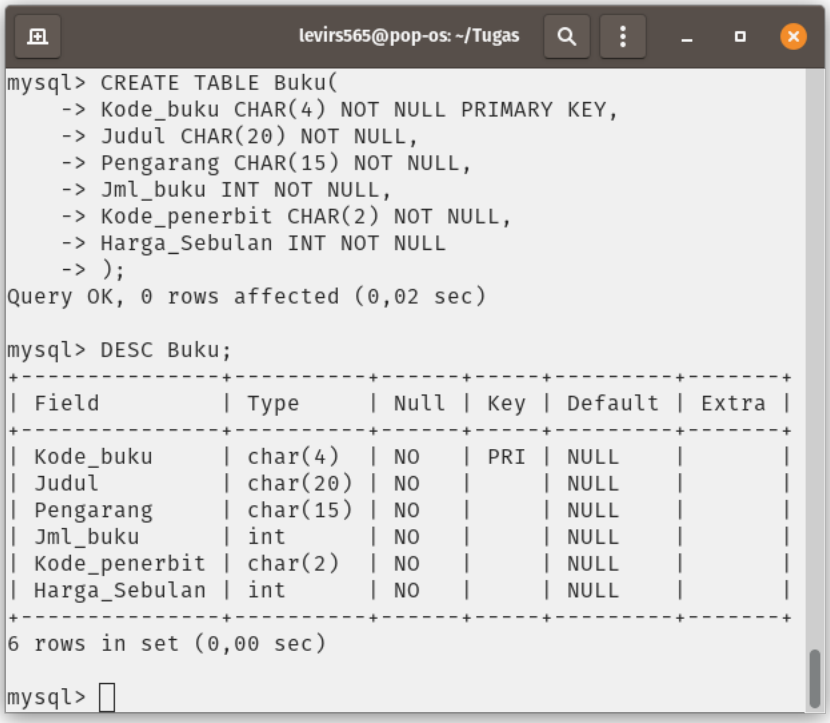
```
Query OK, 0 rows affected (0,02 sec)
```

Query:

```
DESC Buku;
```

Hasil:

```
+---------------+----------+------+-----+---------+-------+
| Field         | Type     | Null | Key | Default | Extra |
+---------------+----------+------+-----+---------+-------+
| Kode_buku     | char(4)  | NO   | PRI | NULL    |       |
| Judul         | char(20) | NO   |     | NULL    |       |
| Pengarang     | char(15) | NO   |     | NULL    |       |
| Jml_buku      | int      | NO   |     | NULL    |       |
| Kode_penerbit | char(2)  | NO   |     | NULL    |       |
| Harga_Sebulan | int      | NO   |     | NULL    |       |
+---------------+----------+------+-----+---------+-------+
6 rows in set (0,00 sec)
```




Query:

```
CREATE TABLE Penerbit(
Kode_penerbit CHAR(2) NOT NULL PRIMARY KEY,
Nm_penerbit CHAR(15) NOT NULL
);
```

Hasil:

```
Query OK, 0 rows affected (0,04 sec)
```

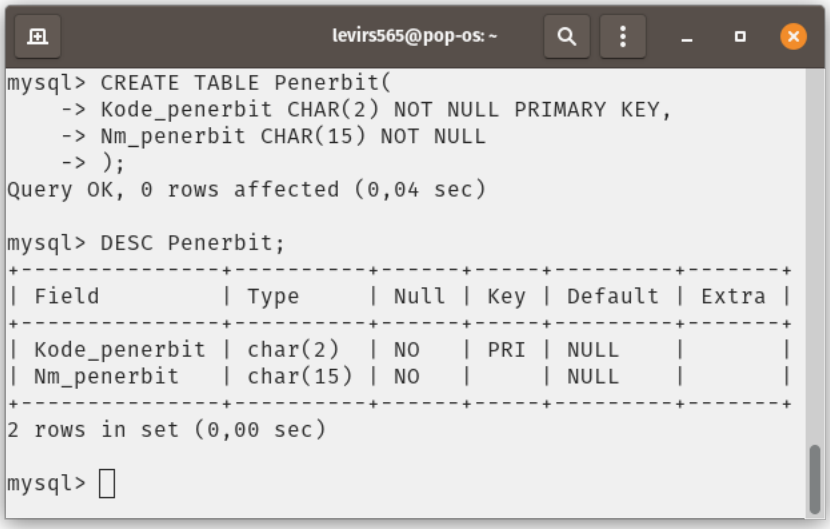
Query:

```
DESC Penerbit;
```

Hasil:

```
+---------------+----------+------+-----+---------+-------+
| Field         | Type     | Null | Key | Default | Extra |
+---------------+----------+------+-----+---------+-------+
| Kode_penerbit | char(2)  | NO   | PRI | NULL    |       |
```

```
| Nm_penerbit   | char(15) | NO   |     | NULL    |       |
+---------------+----------+------+-----+---------+-------+
2 rows in set (0,00 sec)
```




Query:

```sql
CREATE TABLE Pinjam(
ID_Peminjaman INT NOT NULL PRIMARY KEY AUTO_INCREMENT,
Tgl_Pinjam DATETIME NOT NULL,
Mhs_no_induk CHAR(9) NOT NULL,
Buku_kode_buku CHAR(4) NOT NULL,
Tlg_hrs_kembali DATETIME NOT NULL,
Tgl_kembali DATETIME
);
```

Hasil:

```
Query OK, 0 rows affected (0,03 sec)
```

Query:

```sql
ALTER TABLE Pinjam RENAME COLUMN Tlg_hrs_kembali TO Tgl_hrs_kembali;
```

Hasil:

```
Query OK, 0 rows affected (0,04 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

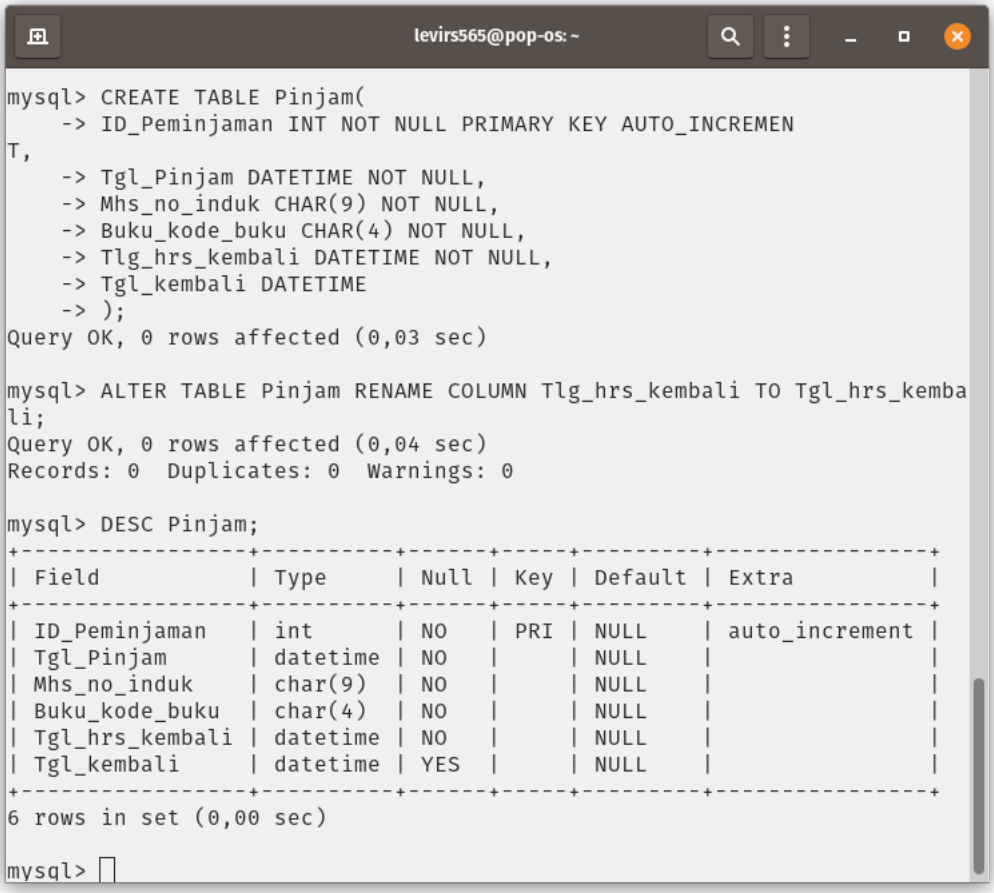
Query:

```sql
DESC Pinjam;
```

Hasil:

```
+-----------------+----------+------+-----+---------+----------------+
| Field           | Type     | Null | Key | Default | Extra          |
+-----------------+----------+------+-----+---------+----------------+
| ID_Peminjaman   | int      | NO   | PRI | NULL    | auto_increment |
| Tgl_Pinjam      | datetime | NO   |     | NULL    |                |
| Mhs_no_induk    | char(9)  | NO   |     | NULL    |                |
```

```
| Buku_kode_buku   | char(4)   | NO   |     | NULL    |                |
| Tgl_hrs_kembali | datetime | NO   |     | NULL    |                |
| Tgl_kembali     | datetime | YES  |     | NULL    |                |
+-----------------+----------+------+-----+---------+----------------+
6 rows in set (0,00 sec)
```




Query:

```
INSERT INTO Penerbit(Kode_penerbit, Nm_penerbit) VALUES
("01", "Informatika"),
("02", "Andi"),
("03", "Gava Media"),
("04", "Erlanggan"),
("05", "ITB"),
("06", "Mizan");
```

Hasil:

```
Query OK, 6 rows affected (0,01 sec)
Records: 6 Duplicates: 0 Warnings: 0
```

Query:

```
UPDATE Penerbit SET Nm_penerbit = "Erlangga" WHERE Kode_penerbit = "04";
```

Hasil:

```
Query OK, 1 row affected (0,00 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

Query:

```
SELECT * FROM Penerbit;
```

Hasil:

```
+---------------+-------------+
| Kode_penerbit | Nm_penerbit |
+---------------+-------------+
| 01            | Informatika |
| 02            | Andi        |
| 03            | Gava Media  |
| 04            | Erlangga    |
| 05            | ITB         |
| 06            | Mizan       |
+---------------+-------------+
6 rows in set (0,00 sec)
```

Query:

```
INSERT INTO Buku(Kode_buku, Judul, Pengarang, Jml_buku, Kode_penerbit, Harga_Sebulan) VALUES
("0001", "Kalkulus E. 9 J. 1", "Purcell", 3, "04", 35000),
("0002", "Matematika Diskrit", "Rinaldi Munir", 7, "02", 12500),
("0003", "Teori Aplikasi C++", "R.H. Sianipar", 2, "01", 17500),
("0004", "Delphi Accounting", "G.H. Away", 6, "01", 16000),
("0005", "Delphi Firebird", "G.H. Away", 3, "01", 15000),
```

```
("0006", "Perpustakaan PHP", "B. Nugroho", 5, "03", 11000),
("0007", "Konsep Teknologi", "Purwasasmita", 10, "05", 4500),
("0008", "Meditation", "M. Aurelius", 20, "06", 9000);
```

Hasil:

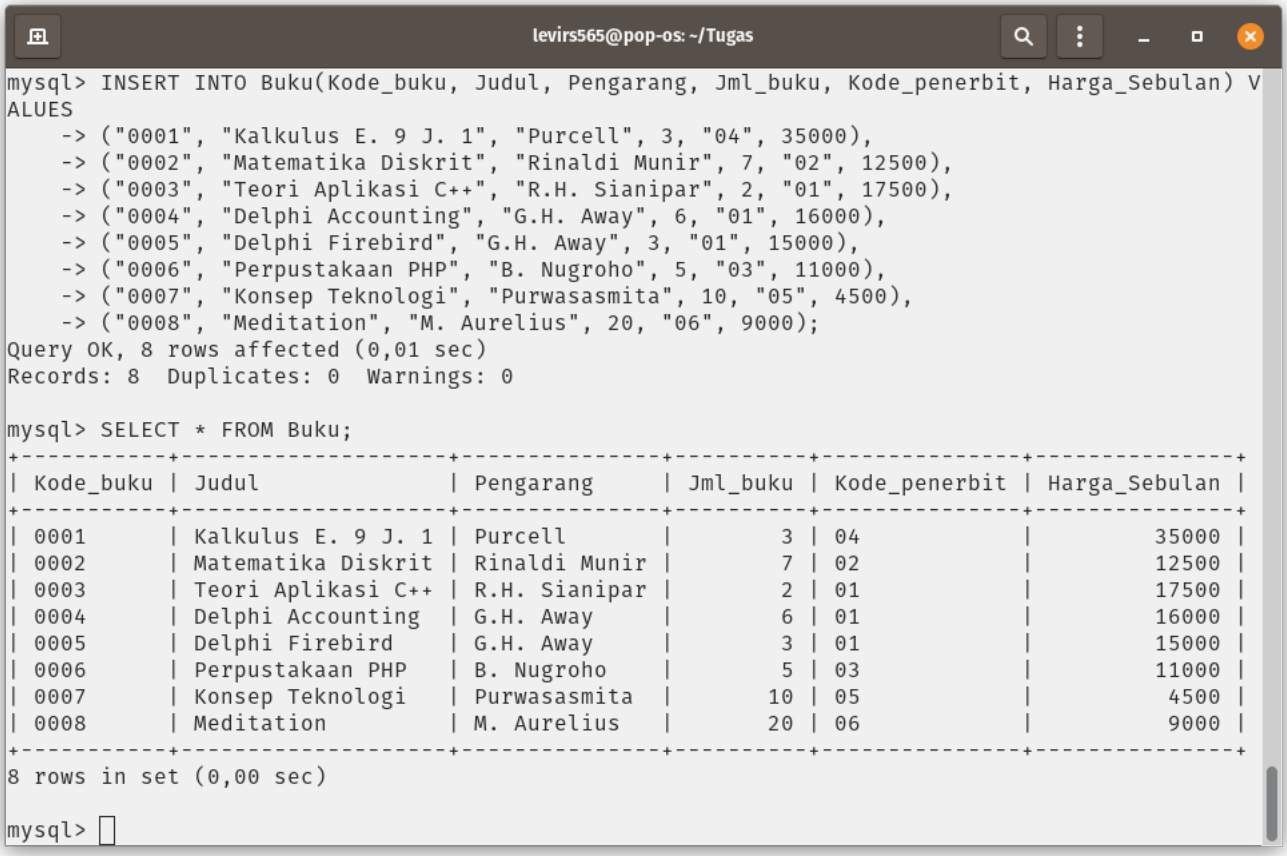
```
Query OK, 8 rows affected (0,01 sec)
Records: 8  Duplicates: 0  Warnings: 0
```

Query:

```
SELECT * FROM Buku;
```

Hasil:

```
| Kode_buku | Judul               | Pengarang     | Jml_buku | Kode_penerbit | Harga_Sebulan |
+-----------+---------------------+---------------+----------+---------------+---------------+
| 0001      | Kalkulus E. 9 J. 1  | Purcell       |        3 | 04            |         35000 |
| 0002      | Matematika Diskrit  | Rinaldi Munir |        7 | 02            |         12500 |
| 0003      | Teori Aplikasi C++  | R.H. Sianipar |        2 | 01            |         17500 |
| 0004      | Delphi Accounting   | G.H. Away     |        6 | 01            |         16000 |
| 0005      | Delphi Firebird     | G.H. Away     |        3 | 01            |         15000 |
| 0006      | Perpustakaan PHP    | B. Nugroho    |        5 | 03            |         11000 |
| 0007      | Konsep Teknologi    | Purwasasmita  |       10 | 05            |          4500 |
| 0008      | Meditation          | M. Aurelius   |       20 | 06            |          9000 |
+-----------+---------------------+---------------+----------+---------------+---------------+
8 rows in set (0,00 sec)
```



Query:

```
INSERT INTO Pinjam(Tgl_Pinjam, Mhs_no_induk, Buku_kode_buku, Tgl_hrs_kembali, Tgl_kembali)
↪  VALUES
("2023-06-03", "123230158", "0008", "2023-07-03", "2023-07-01"),
("2023-06-17", "123230121", "0004", "2023-07-17", "2023-07-15"),
("2023-06-24", "123230127", "0001", "2023-07-24", "2023-07-23"),
("2023-07-14", "123230214", "0006", "2023-08-13", "2023-08-10"),
("2023-07-23", "123230134", "0002", "2023-08-22", "2023-08-20"),
("2023-07-24", "123230128", "0007", "2023-08-23", "2023-08-21"),
("2023-08-01", "123230001", "0005", "2023-08-31", "2023-08-30"),
("2023-08-10", "123230067", "0003", "2023-09-09", "2023-09-08"),
("2023-09-01", "123230147", "0007", "2023-10-01", "2023-09-24");
```

Hasil:

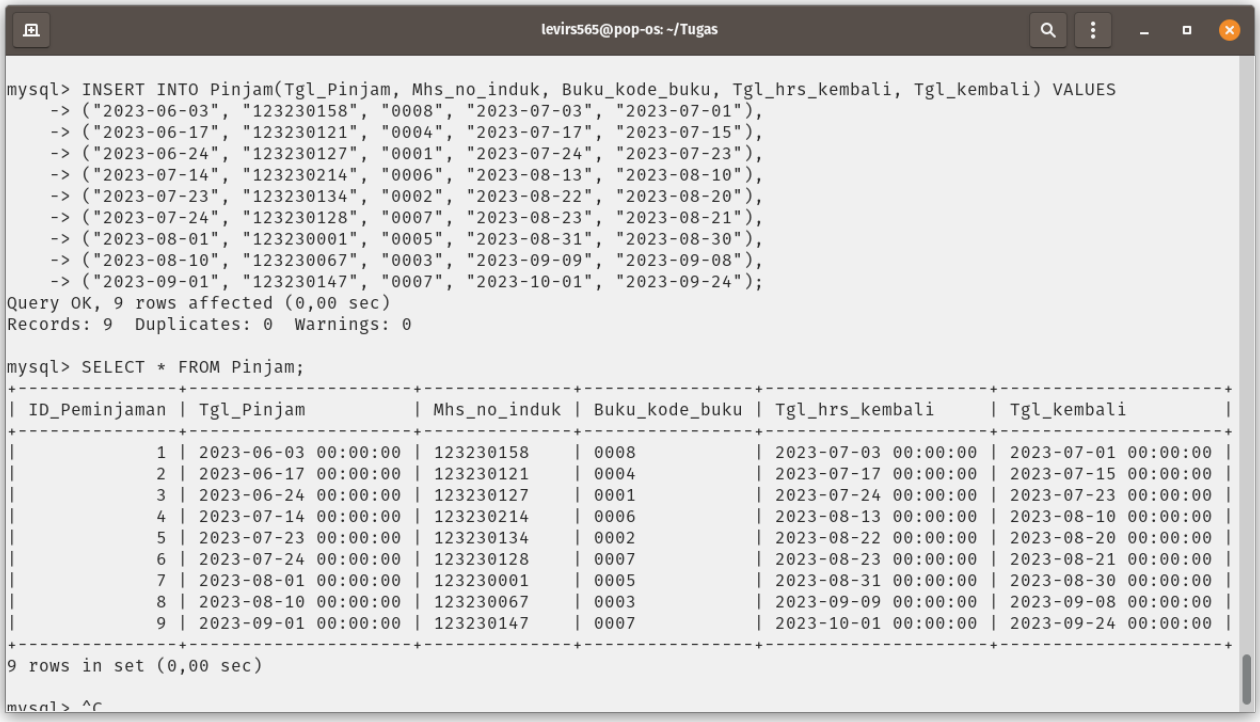
```
Query OK, 9 rows affected (0,00 sec)
Records: 9  Duplicates: 0  Warnings: 0
```

Query:

```
SELECT * FROM Pinjam;
```

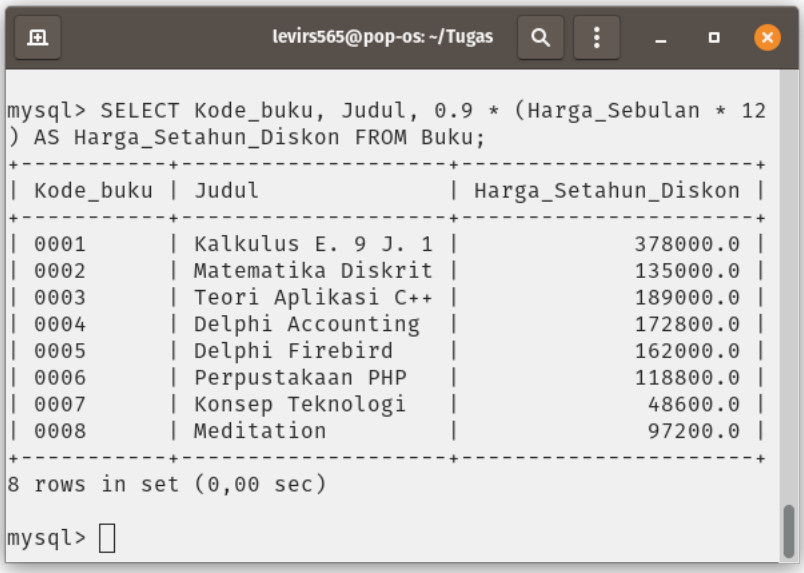
Hasil:

```
+---------------+---------------------+--------------+----------------+---------------------+---------------------+
| ID_Peminjaman | Tgl_Pinjam          | Mhs_no_induk | Buku_kode_buku | Tgl_hrs_kembali     | Tgl_kembali         |
+---------------+---------------------+--------------+----------------+---------------------+---------------------+
|             1 | 2023-06-03 00:00:00 | 123230158    | 0008           | 2023-07-03 00:00:00 | 2023-07-01 00:00:00 |
|             2 | 2023-06-17 00:00:00 | 123230121    | 0004           | 2023-07-17 00:00:00 | 2023-07-15 00:00:00 |
|             3 | 2023-06-24 00:00:00 | 123230127    | 0001           | 2023-07-24 00:00:00 | 2023-07-23 00:00:00 |
|             4 | 2023-07-14 00:00:00 | 123230214    | 0006           | 2023-08-13 00:00:00 | 2023-08-10 00:00:00 |
|             5 | 2023-07-23 00:00:00 | 123230134    | 0002           | 2023-08-22 00:00:00 | 2023-08-20 00:00:00 |
|             6 | 2023-07-24 00:00:00 | 123230128    | 0007           | 2023-08-23 00:00:00 | 2023-08-21 00:00:00 |
|             7 | 2023-08-01 00:00:00 | 123230001    | 0005           | 2023-08-31 00:00:00 | 2023-08-30 00:00:00 |
|             8 | 2023-08-10 00:00:00 | 123230067    | 0003           | 2023-09-09 00:00:00 | 2023-09-08 00:00:00 |
|             9 | 2023-09-01 00:00:00 | 123230147    | 0007           | 2023-10-01 00:00:00 | 2023-09-24 00:00:00 |
+---------------+---------------------+--------------+----------------+---------------------+---------------------+
9 rows in set (0,00 sec)
```



Query:

```
SELECT Kode_buku, Judul, 0.9 * (Harga_Sebulan * 12) AS Harga_Setahun_Diskon FROM Buku;
```

Hasil:

```
+-----------+--------------------+----------------------+
| Kode_buku | Judul              | Harga_Setahun_Diskon |
+-----------+--------------------+----------------------+
| 0001      | Kalkulus E. 9 J. 1 |             378000.0 |
| 0002      | Matematika Diskrit |             135000.0 |
| 0003      | Teori Aplikasi C++ |             189000.0 |
| 0004      | Delphi Accounting  |             172800.0 |
| 0005      | Delphi Firebird    |             162000.0 |
| 0006      | Perpustakaan PHP   |             118800.0 |
| 0007      | Konsep Teknologi   |              48600.0 |
| 0008      | Meditation         |              97200.0 |
+-----------+--------------------+----------------------+
8 rows in set (0,00 sec)
```