

**IF2240 - Basis Data**

# **Praktikum 0**

**Eksplorasi SQL**

12 Maret 2025 - 17 Maret 2025

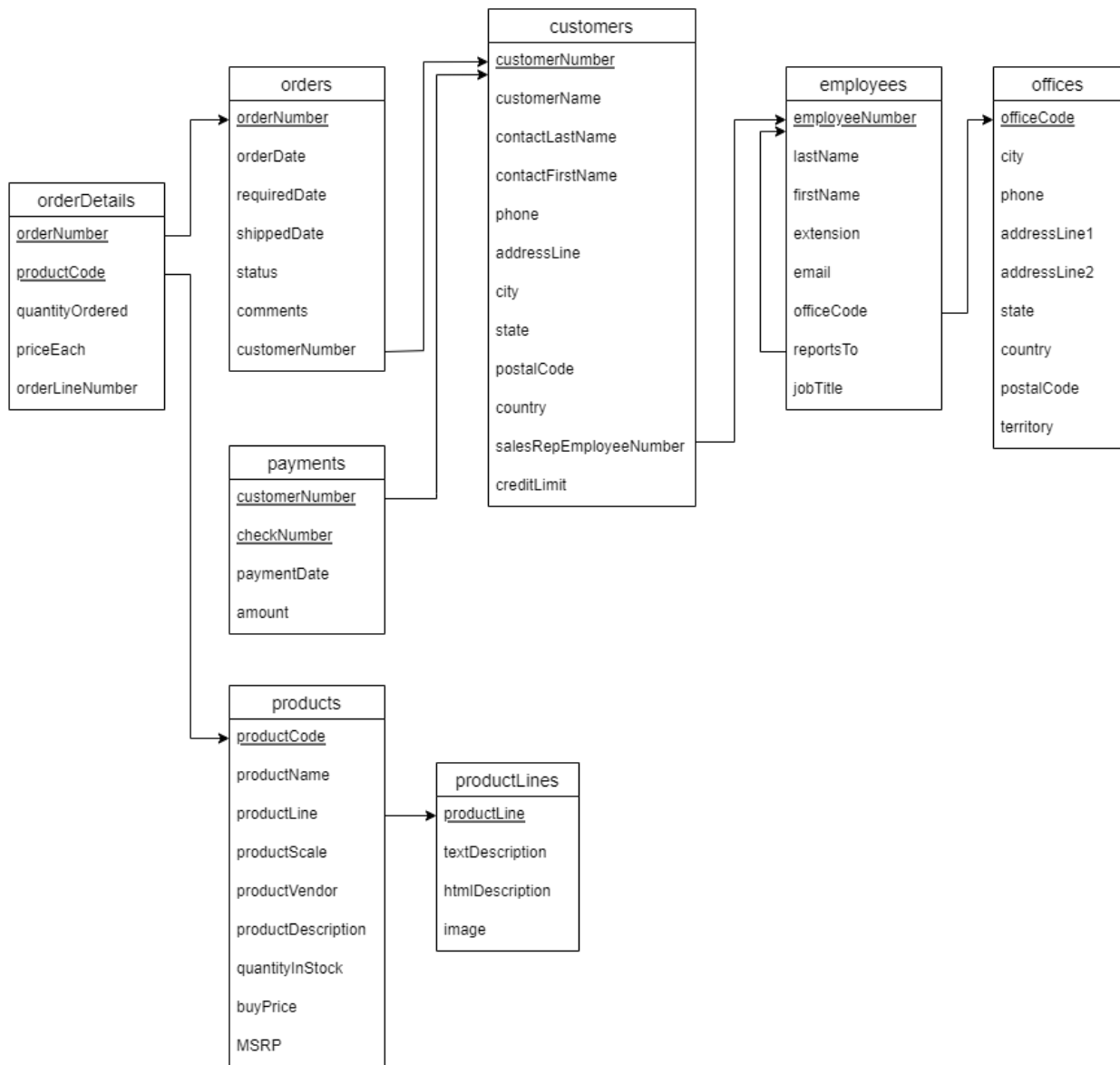


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2025**

# Multinational Company



## Legenda

No	Nama Tabel	Keterangan
1	customers	Pelanggan dari perusahaan
2	employees	Pegawai dari perusahaan
3	offices	Kantor cabang perusahaan
4	orders	Pemesanan
5	orderDetails	Detail barang yang dipesan untuk pemesanan tertentu
6	payments	Pembayaran yang dilakukan pelanggan
7	products	Produk yang dijual perusahaan
8	productLines	Lini produk

## Petunjuk

1. Praktikum 0 bersifat *take home*.
2. Praktikum ini bersifat individual. Segala plagiarisme akan mengakibatkan nilai 0 pada praktikum ini.

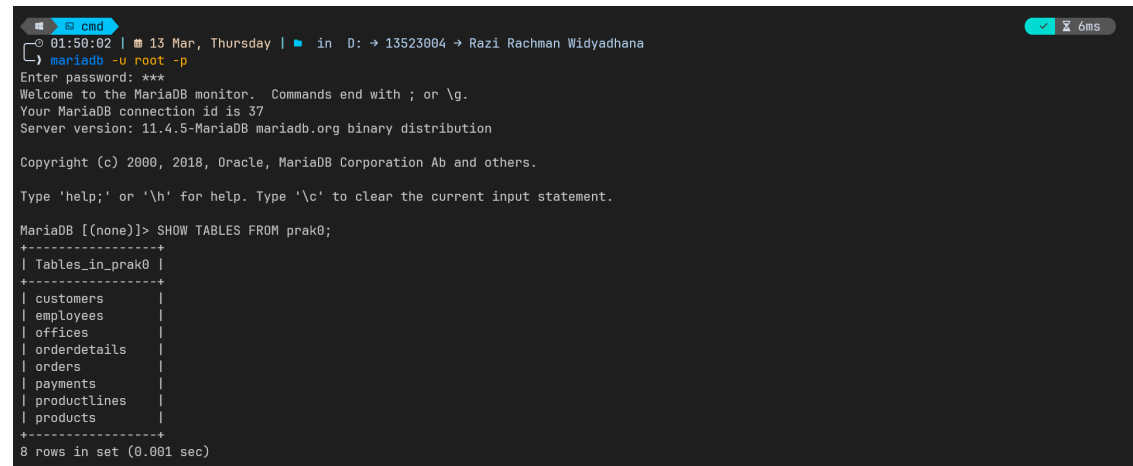
## I. Soal

1. Buatlah *query* untuk menampilkan seluruh tabel yang terdapat dalam database prak0!

### QUERY:

```
SHOW TABLES FROM prak0;
```

### SCREENSHOT:



```
cmd
01:50:02 | 13 Mar, Thursday | in D: → 13523004 → Razi Rachman Widyadhana
mariadb -u root -p
Enter password: ***
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 37
Server version: 11.4.5-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.

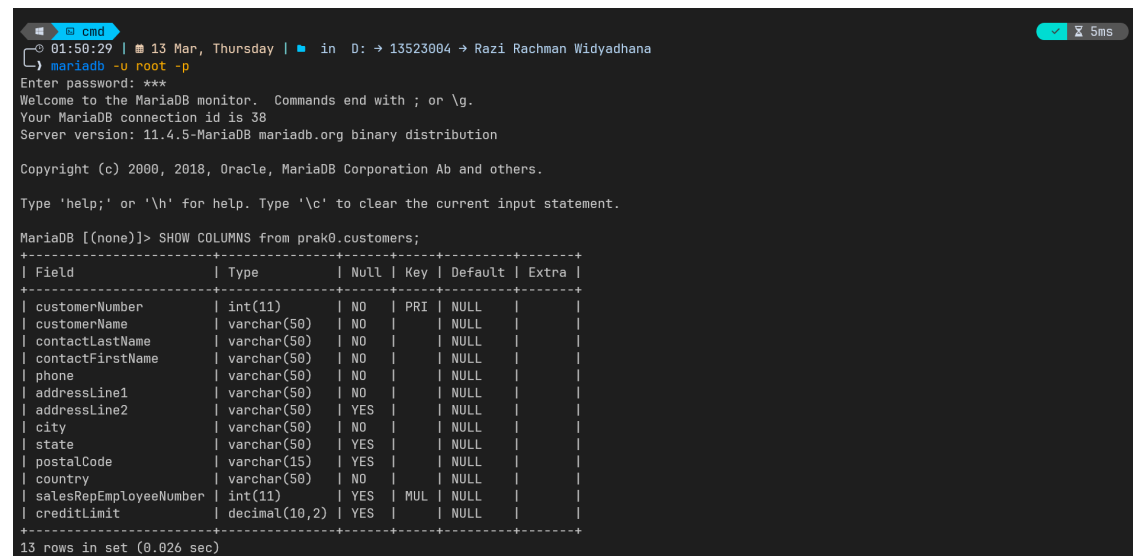
MariaDB [(none)]> SHOW TABLES FROM prak0;
+-----+
| Tables_in_prak0 |
+-----+
| customers        |
| employees        |
| offices          |
| orderdetails     |
| orders           |
| payments         |
| productlines     |
| products         |
+-----+
8 rows in set (0.001 sec)
```

2. Buatlah *query* untuk menampilkan detail informasi atribut dari entitas customers yang terdapat dalam database prak0!

### QUERY:

```
SHOW COLUMNS FROM prak0.customers;
```

### SCREENSHOT:



```
cmd
01:50:29 | 13 Mar, Thursday | in D: → 13523004 → Razi Rachman Widyadhana
mariadb -u root -p
Enter password: ***
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 38
Server version: 11.4.5-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)]> SHOW COLUMNS from prak0.customers;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| customerNumber | int(11) | NO | PRI | NULL | |
| customerName   | varchar(50) | NO | | NULL | |
| contactLastName | varchar(50) | NO | | NULL | |
| contactFirstName | varchar(50) | NO | | NULL | |
| phone         | varchar(50) | NO | | NULL | |
| addressLine1   | varchar(50) | NO | | NULL | |
| addressLine2   | varchar(50) | YES | | NULL | |
| city           | varchar(50) | NO | | NULL | |
| state         | varchar(50) | YES | | NULL | |
| postalCode     | varchar(15) | YES | | NULL | |
| country        | varchar(50) | NO | | NULL | |
| salesRepEmployeeNumber | int(11) | YES | MUL | NULL | |
| creditLimit    | decimal(10,2) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
13 rows in set (0.026 sec)
```

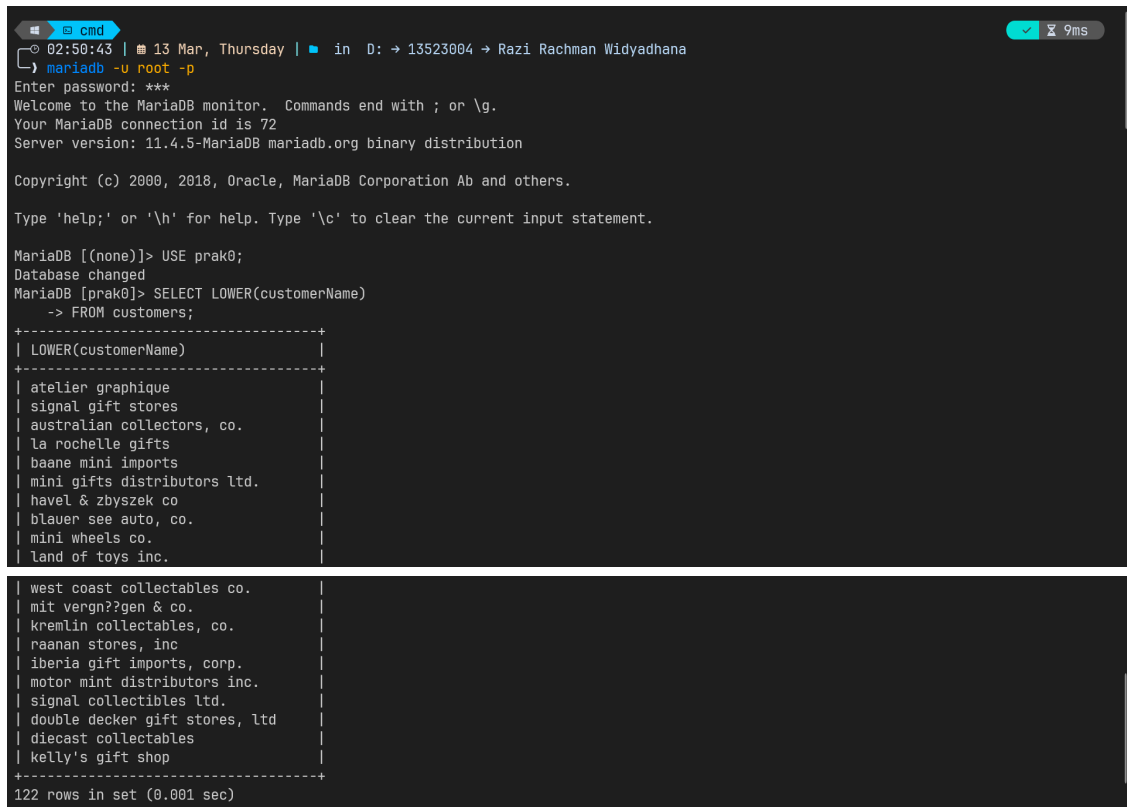
3. Buatlah *query* untuk menampilkan seluruh nama pengunjung dalam huruf kecil!

*HINT: gunakan LOWER( )*

**QUERY:**

```
USE prak0;  
SELECT LOWER(customerName)  
FROM customers;
```

**SCREENSHOT:**



```
cmd 02:50:43 | 13 Mar, Thursday | in D: -> 13523004 -> Razi Rachman Widyadhana  
-> mariadb -u root -p  
Enter password: ***  
Welcome to the MariaDB monitor.  Commands end with ; or \g.  
Your MariaDB connection id is 72  
Server version: 11.4.5-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)]> USE prak0;  
Database changed  
MariaDB [prak0]> SELECT LOWER(customerName)  
-> FROM customers;  
+-----+  
| LOWER(customerName) |  
+-----+  
| atelier graphique   |  
| signal gift stores  |  
| australian collectors, co. |  
| la rochelle gifts   |  
| baane mini imports  |  
| mini gifts distributors ltd. |  
| havel & zbyszek co   |  
| blauer see auto, co. |  
| mini wheels co.     |  
| land of toys inc.   |  
+-----+  
| west coast collectables co. |  
| mit vergn??gen & co. |  
| kremlin collectables, co. |  
| raanan stores, inc |  
| iberia gift imports, corp. |  
| motor mint distributors inc. |  
| signal collectibles ltd. |  
| double decker gift stores, ltd |  
| diecast collectables |  
| kelly's gift shop |  
+-----+  
122 rows in set (0.001 sec)
```

4. Buatlah *query* untuk menampilkan 5 nama pengunjung yang berasal dari kota Bern!

*HINT: gunakan LIMIT untuk membatasi jumlah data yang ditampilkan*

**QUERY:**

```
USE prak0;  
SELECT customerName  
FROM customers  
WHERE city = 'Bern'  
LIMIT 5;
```

## SCREENSHOT:

```
cmd
02:53:28 | 13 Mar, Thursday | in D: → 13523004 → Razi Rachman Widyadhana
→ mariadb -u root -p
Enter password: ***
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 74
Server version: 11.4.5-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)]> USE prak0;
Database changed
MariaDB [prak0]> SELECT customerName
  -> FROM customers
  -> WHERE city = 'Bern'
  -> LIMIT 5;
+-----+
| customerName |
+-----+
| Precious Collectables |
+-----+
1 row in set (0.001 sec)
```

5. Buatlah *query* untuk menampilkan nama pegawai yang bekerja di kantor yang berada di negara Australia!

*HINT: gunakan CONCAT() untuk menggabungkan lebih dari 1 string*

## QUERY:

```
USE prak0;
SELECT CONCAT(employees.firstName, ' ', employees.lastName) AS
employeeName
FROM employees
JOIN offices ON employees.officeCode = offices.officeCode
WHERE offices.country = 'Australia';
```

## SCREENSHOT:

```
cmd
02:53:49 | 13 Mar, Thursday | in D: → 13523004 → Razi Rachman Widyadhana
→ mariadb -u root -p
Enter password: ***
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 75
Server version: 11.4.5-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.

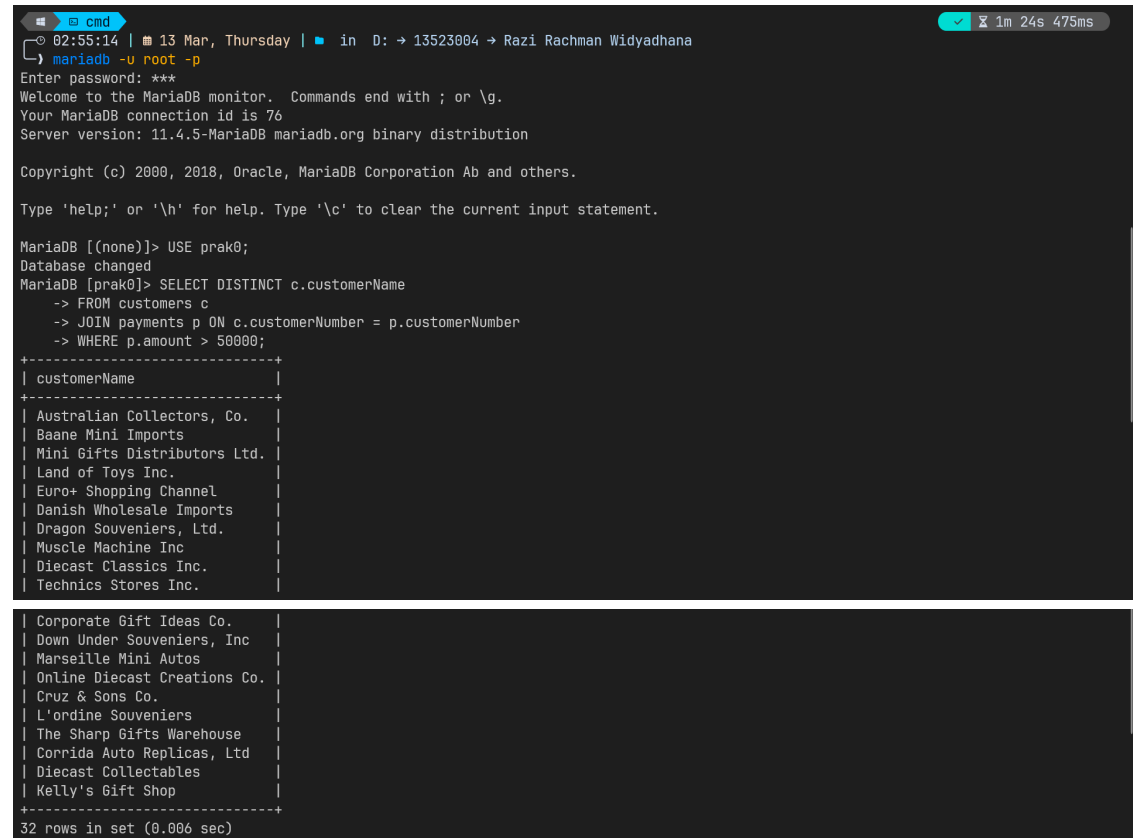
MariaDB [(none)]> USE prak0;
Database changed
MariaDB [prak0]> SELECT CONCAT(employees.firstName, ' ', employees.lastName) AS employeeName
  -> FROM employees
  -> JOIN offices ON employees.officeCode = offices.officeCode
  -> WHERE offices.country = 'Australia';
+-----+
| employeeName |
+-----+
| William Patterson |
| Andy Fixter |
| Peter Marsh |
| Tom King |
+-----+
4 rows in set (0.001 sec)
```

6. Buatlah *query* yang menampilkan nama pengunjung yang pernah membuat pembayaran dengan jumlah diatas 50000!

**QUERY:**

```
USE prak0;  
SELECT DISTINCT c.customerName  
FROM customers c  
JOIN payments p ON c.customerNumber = p.customerNumber  
WHERE p.amount > 50000;
```

**SCREENSHOT:**



```
02:55:14 | 13 Mar, Thursday | in D: → 13523004 → Razi Rachman Widyadhana  
mariadb -u root -p  
Enter password: ***  
Welcome to the MariaDB monitor. Commands end with ; or \g.  
Your MariaDB connection id is 76  
Server version: 11.4.5-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)]> USE prak0;  
Database changed  
MariaDB [prak0]> SELECT DISTINCT c.customerName  
-> FROM customers c  
-> JOIN payments p ON c.customerNumber = p.customerNumber  
-> WHERE p.amount > 50000;  
+-----+  
| customerName |  
+-----+  
| Australian Collectors, Co. |  
| Baane Mini Imports |  
| Mini Gifts Distributors Ltd. |  
| Land of Toys Inc. |  
| Euro+ Shopping Channel |  
| Danish Wholesale Imports |  
| Dragon Souvenirs, Ltd. |  
| Muscle Machine Inc |  
| Diecast Classics Inc. |  
| Technics Stores Inc. |  
+-----+  
| Corporate Gift Ideas Co. |  
| Down Under Souvenirs, Inc |  
| Marseille Mini Autos |  
| OnLine Diecast Creations Co. |  
| Cruz & Sons Co. |  
| L'ordine Souvenirs |  
| The Sharp Gifts Warehouse |  
| Corrida Auto Replicas, Ltd |  
| Diecast Collectables |  
| Kelly's Gift Shop |  
+-----+  
32 rows in set (0.006 sec)
```

7. Buatlah *query* untuk menampilkan nama pengunjung yang dilayani oleh pegawai yang bekerja di kantor yang berada di negara Japan!

**QUERY:**

```
USE prak0;  
SELECT DISTINCT c.customerName  
FROM customers c  
JOIN employees e ON c.salesRepEmployeeNumber = e.employeeNumber  
JOIN offices o ON e.officeCode = o.officeCode  
WHERE o.country = 'Japan';
```

## SCREENSHOT:

```
cmd
03:00:57 | 13 Mar, Thursday | in D: → 13523004 → Razi Rachman Widyadhana
→ mariadb -u root -p
Enter password: ***
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 78
Server version: 11.4.5-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)]> USE praktik;
Database changed
MariaDB [praktik]> SELECT DISTINCT c.customerName
  -> FROM customers c
  -> JOIN employees e ON c.salesRepEmployeeNumber = e.employeeNumber
  -> JOIN offices o ON e.officeCode = o.officeCode
  -> WHERE o.country = 'Japan';
+-----+
| customerName |
+-----+
| Dragon Souvenirs, Ltd. |
| Osaka Souvenirs Co. |
| King Kong Collectables, Co. |
| Cruz & Sons Co. |
| Tokyo Collectables, Ltd |
+-----+
5 rows in set (0.000 sec)
```

8. Buatlah *query* untuk menampilkan nama produk yang memiliki harga beli di atas 50 dan pernah dipesan di antara bulan April sampai September (inklusif)!

## QUERY:

```
USE praktik;
SELECT DISTINCT p.productName FROM products p
JOIN orderdetails od ON p.productCode = od.productCode
JOIN orders o ON od.orderNumber = o.orderNumber
WHERE p.buyPrice > 50 AND MONTH(o.orderDate) BETWEEN 4 AND 9;
```

## SCREENSHOT:

```
cmd
03:04:10 | 13 Mar, Thursday | in D: → 13523004 → Razi Rachman Widyadhana
→ mariadb -u root -p
Enter password: ***
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 80
Server version: 11.4.5-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)]> USE praktik;
Database changed
MariaDB [praktik]> SELECT DISTINCT p.productName FROM products p
  -> JOIN orderdetails od ON p.productCode = od.productCode
  -> JOIN orders o ON od.orderNumber = o.orderNumber
  -> WHERE p.buyPrice > 50 AND MONTH(o.orderDate) BETWEEN 4 AND 9;
+-----+
| productName |
+-----+
| 1952 Alpine Renault 1300 |
| 1996 Moto Guzzi 1100i |
| 2003 Harley-Davidson Eagle Drag Bike |
| 1972 Alfa Romeo GTA |
| 1962 LanciaA Delta 16V |
| 1968 Ford Mustang |
| 2001 Ferrari Enzo |
| 1958 Setra Bus |
| 2002 Suzuki XRE0 |
| 1969 Corvair Monza |
+-----+
```



```

| 1980?C0s GM Manhattan Express |
| 1997 BMW F650 ST |
| 1974 Ducati 350 Mk3 Desmo |
| Diamond T620 Semi-Skirted Tanker |
| American Airlines: B767-300 |
| America West Airlines B757-200 |
| ATA: B757-300 |
| F/A 18 Hornet 1/72 |
| The Titanic |
| The Queen Mary |
+-----+
61 rows in set (0.001 sec)

```

9. Buatlah query untuk menampilkan nama lengkap karyawan yang melapor kepada Anthony Bow dan pernah melayani pengunjung yang berasal dari Brickhaven atau Las Vegas!

#### QUERY:

```

USE prak0;
SELECT DISTINCT CONCAT(e.firstName, ' ', e.lastName)
AS employeeName FROM employees e
JOIN customers c ON e.employeeNumber = c.salesRepEmployeeNumber
JOIN employees manager ON e.reportsTo = manager.employeeNumber
WHERE manager.firstName = 'Anthony'
AND manager.lastName = 'Bow'
AND (c.city = 'Brickhaven' OR c.city = 'Las Vegas');

```

#### SCREENSHOT:

```

cmd
03:06:19 | 13 Mar, Thursday | in D: → 13523004 → Razi Rachman Widyadhana
mariadb -u root -p
Enter password: ***
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MariaDB connection id is 81
Server version: 11.4.5-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)]> USE prak0;
Database changed
MariaDB [prak0]> SELECT DISTINCT CONCAT(e.firstName, ' ', e.lastName) AS employeeName
-> FROM employees e
-> JOIN customers c ON e.employeeNumber = c.salesRepEmployeeNumber
-> JOIN employees manager ON e.reportsTo = manager.employeeNumber
-> WHERE manager.firstName = 'Anthony' AND manager.lastName = 'Bow'
-> AND (c.city = 'Brickhaven' OR c.city = 'Las Vegas');
+-----+
| employeeName |
+-----+
| Leslie Thompson |
| Julie Firrelli |
| Steve Patterson |
+-----+
3 rows in set (0.001 sec)

```