

IF2240 - Basis Data

Praktikum 0

Eksplorasi SQL

29 Februari 2024 - 6 Maret 2024

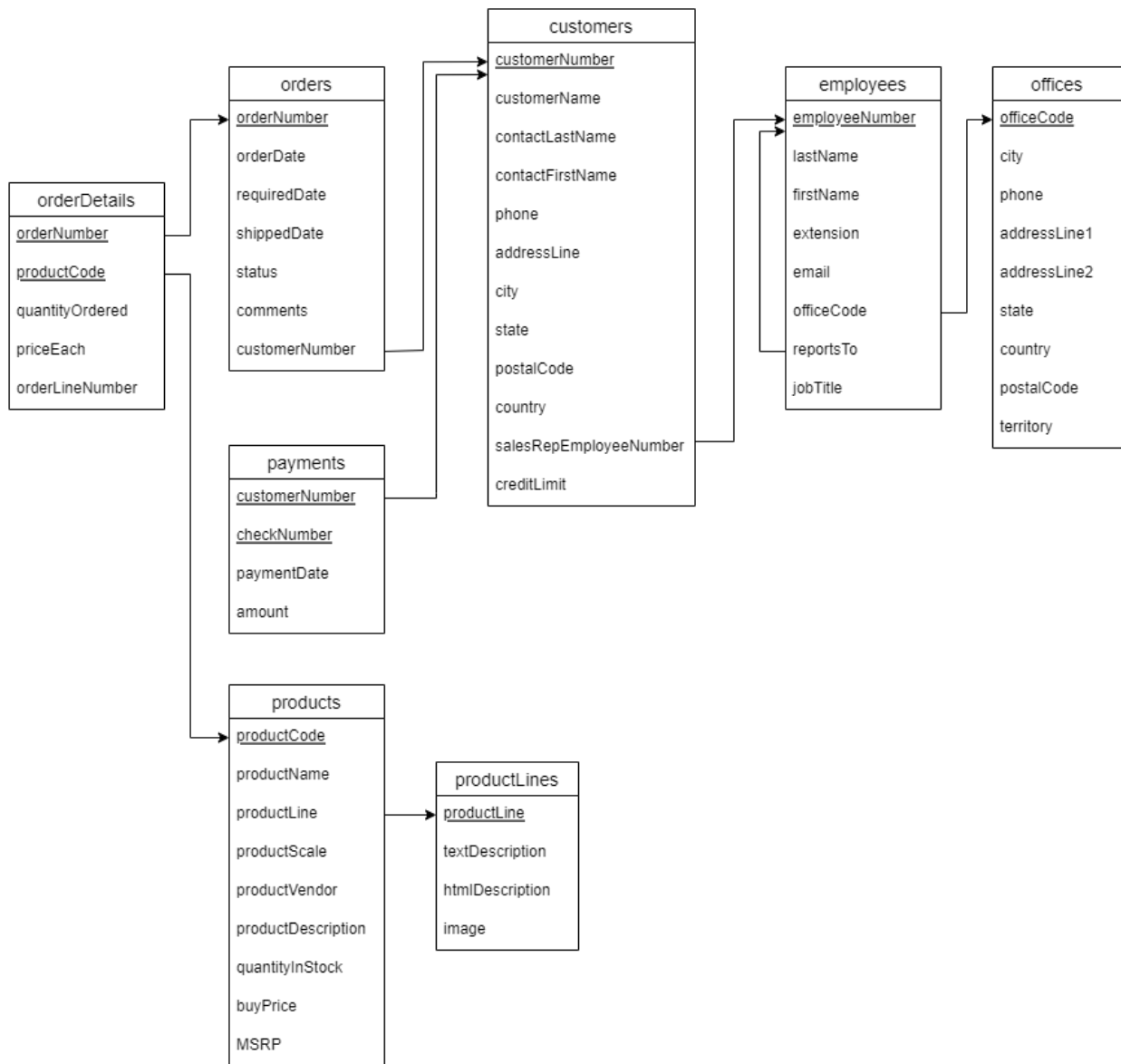


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Sekolah Teknik Elektro dan Informatika
Institut Teknologi Bandung
2024**

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 *takehome*.
2. Praktikum ini bersifat individual. Segala plagiarisme akan mengakibatkan nilai 0 pada praktikum ini.
3. Lakukan *make a copy* pada file ini, lalu kerjakan secara langsung pada Google Docs tersebut. Isi kolom *query* dengan jawaban *query* yang sesuai dengan deskripsi soal. Isi kolom *screenshot* dengan tangkapan layar *query* dan hasilnya pada terminal MariaDB.
4. Kumpulkan hasil praktikum paling lambat Rabu, 6 Maret 2024 pukul 22.40 melalui <https://forms.gle/szsXQTTidwe96AAn8>. Pengumpulan terlambat akan mendapat pengurangan nilai.

I. Soal

1. Buatlah *query* untuk menampilkan seluruh tabel yang terdapat dalam database prak1!

QUERY:

show tables;

SCREENSHOT:

```
MariaDB [prak1]> show tables;
+-----+
| Tables_in_prak1 |
+-----+
| customers        |
| employees        |
| offices          |
| orderdetails     |
| orders           |
| payments         |
| productlines     |
| products         |
+-----+
8 rows in set (0.001 sec)

MariaDB [prak1]> |
```

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

QUERY:

describe customers;

SCREENSHOT:

```
MariaDB [prak1]> describe 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 (0.015 sec)

MariaDB [prak1]> |
```

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

HINT: gunakan LOWER()

QUERY:

```
select LOWER(customerName) from customers;
```

SCREENSHOT:

```
MariaDB [prak1]> 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.  |
| euro+ shopping channel |
| volvo model replicas, co |
| danish wholesale imports |
| saveley & henriot, co. |
| dragon souvenirs, ltd. |
| muscle machine inc  |
| diecast classics inc. |
| technics stores inc. |
| handji gifts& co    |
| herkku gifts        |
| american souvenirs inc |
| porto imports co.   |
| daedalus designs imports |
| la corne d'abondance, co. |
| cambridge collectables co. |
| gift depot inc.     |
| osaka souvenirs co. |
| vitachrome inc.     |
| toys of finland, co. |
| av stores, co.      |
| clover collections, co. |
| auto-moto classics inc. |
| uk collectables, ltd. |
| canadian gift exchange network |
| online mini collectables |
| toys4grownups.com    |
| asian shopping network, co |
| mini caravy          |
| king kong collectables, co. |
| enaco distributors   |
| boards & toys co.    |
| nat??rlich autos     |
```

```
| reims collectables  
| sar distributors, co  
| giftsforhim.com  
| kommission auto  
| gifts4allages.com  
| online diecast creations co.  
| lisboa souvenirs, inc  
| precious collectables  
| collectables for less inc.  
| royale belge  
| salzburg collectables  
| cruz & sons co.  
| l'ordine souvenirs  
| tokyo collectables, ltd  
| auto canal+ petit  
| stuttgart collectable exchange  
| extreme desk decorations, ltd  
| bavarian collectables imports, co.  
| classic legends inc.  
| feuer online stores, inc  
| gift ideas corp.  
| scandinavian gift ideas  
| the sharp gifts warehouse  
| mini auto werke  
| super scale inc.  
| microscale inc.  
| corrida auto replicas, ltd  
| warburg exchange  
| fungiftideas.com  
| anton designs, ltd.  
| australian collectables, ltd  
| frau da collezione  
| 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 (0.004 sec)
```

```
MariaDB [prak1]> |
```

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

HINT: gunakan LIMIT untuk membatasi jumlah data yang ditampilkan

QUERY:

```
select customerName from customers where city="Bern" LIMIT 5;
```

SCREENSHOT:

```
MariaDB [prakt1]> select customerName from customers where city="Bern" LIMIT 5;
+-----+
| customerName |
+-----+
| Precious Collectables |
+-----+
1 row in set (0.005 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:

```
select CONCAT(firstName, ' ', lastName) as name from employees as e, offices as o
where o.country = "Australia" and e.officeCode = o.officeCode;
```

SCREENSHOT:

```
MariaDB [prakt1]> select CONCAT(firstName, ' ', lastName) as name from employees as e, offices as o where
o.country = "Australia" and e.officeCode = o.officeCode;
+-----+
| name |
+-----+
| 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:

```
select customerName from customers as c, payments as p where p.amount
> 50000 and c.customerNumber = p.customerNumber;
```

SCREENSHOT:

```
MariaDB [prakt1]> select customerName from customers as c, payments as p where p.amount
> 50000 and c.customerNumber = p.customerNumber;
```

```
+-----+
| customerName |
+-----+
| Australian Collectors, Co. |
| Baane Mini Imports |
| Mini Gifts Distributors Ltd. |
| Mini Gifts Distributors Ltd. |
| Mini Gifts Distributors Ltd. |
| Mini Gifts Distributors Ltd. |
| Mini Gifts Distributors Ltd. |
| Land of Toys Inc. |
| Euro+ Shopping Channel |
| Euro+ Shopping Channel |
| Euro+ Shopping Channel |
| Euro+ Shopping Channel |
| Euro+ Shopping Channel |
| Danish Wholesale Imports |
| Dragon Souvenirs, Ltd. |
| Muscle Machine Inc |
| Muscle Machine Inc |
| Diecast Classics Inc. |
| Technics Stores Inc. |
| Herkku Gifts |
| La Corne D'abondance, Co. |
| AV Stores, Co. |
| Online Mini Collectables |
| Toys4GrownUps.com |
| Heintze Collectables |
| Collectable Mini Designs Co. |
| Auto Associ??s & Cie. |
| Toms Spezialit?iten, Ltd |
| Rovelli Gifts |
| Vida Sport, Ltd |
| Mini Creations Ltd. |
| Corporate Gift Ideas Co. |
| Down Under Souvenirs, Inc |
| Marseille Mini Autos |
| Online Diecast Creations Co. |
| Online Diecast Creations Co. |
| Cruz & Sons Co. |
| L'ordine Souvenirs |
| The Sharp Gifts Warehouse |
| Corrida Auto Replicas, Ltd |
| Diecast Collectables |
| Kelly's Gift Shop |
+-----+
```

```
42 rows in set (0.004 sec)
```

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

QUERY:

```
select customerName from customers as c, employees as e, offices as o where
o.country = "Japan" and o.officeCode = e.officeCode and
c.salesRepEmployeeNumber = e.employeeNumber;
```

SCREENSHOT:


```

MariaDB [prakt1]> select customerName from customers as c, employees as e, offices as o where o.country
= "Japan" and o.officeCode = e.officeCode and c.salesRepEmployeeNumber = e.employeeNumber;
+-----+
| customerName |
+-----+
| Dragon Souvenirs, Ltd. |
| Osaka Souvenirs Co. |
| King Kong Collectables, Co. |
| Cruz & Sons Co. |
| Tokyo Collectables, Ltd |
+-----+
5 rows in set (0.001 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:

```

select distinct productName from products as p, orderDetails as od, orders as o where
p.buyPrice > 50 and 4 <= month(o.orderDate) <= 9 and o.orderNumber =
od.orderNumber and od.productCode = p.productCode;

```

SCREENSHOT:

```

MariaDB [prakt1]> select distinct productName from products as p, orderDetails as od, orders as o where p.buyPrice > 50 and 4 <= m
onth(o.orderDate) <= 9 and o.orderNumber = od.orderNumber and od.productCode = p.productCode;
+-----+
| 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 XREO |
| 1969 Corvair Monza |
| 1968 Dodge Charger |
| 1969 Ford Falcon |
| 1957 Chevy Pickup |
| 1969 Dodge Charger |
| 1940 Ford Pickup Truck |
| 1993 Mazda RX-7 |
| 1937 Lincoln Berline |
| 1965 Aston Martin DB5 |
| 1980s Black Hawk Helicopter |
| 1917 Grand Touring Sedan |
| 1948 Porsche 356-A Roadster |
| 1995 Honda Civic |
| 1998 Chrysler Plymouth Prowler |
| 1964 Mercedes Tour Bus |
| 1932 Model A Ford J-Coupe |
| 1928 Mercedes-Benz SSK |
+-----+

```

```

1999 Indy 500 Monte Carlo SS
1913 Ford Model T Speedster
1999 Yamaha Speed Boat
18th Century Vintage Horse Carriage
1903 Ford Model A
1992 Ferrari 360 Spider red
Collectable Wooden Train
1917 Maxwell Touring Car
1976 Ford Gran Torino
1948 Porsche Type 356 Roadster
1941 Chevrolet Special Deluxe Cabriolet
1970 Triumph Spitfire
1904 Buick Runabout
1940s Ford truck
1957 Corvette Convertible
1997 BMW R 1100 S
1928 British Royal Navy Airplane
18th century schooner
1962 Volkswagen Microbus
1952 Citroen-15CV
1969 Chevrolet Camaro Z28
2002 Chevy Corvette
1956 Porsche 356A Coupe
1992 Porsche Cayenne Turbo Silver
1936 Chrysler Airflow
1980?CÖs 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 (0.002 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:

```

select CONCAT(firstName, ' ', lastName) as name from employees as e, customers as c where e.reportsTo = "Anthony Bow" and c.city = "Brickhaven" or c.city = "Las Vegas" and e.employeeNumber = c.salesRepEmployeeNumber;

```

SCREENSHOT:

```

MariaDB [prakt1]> select CONCAT(firstName, ' ', lastName) as name from employees as e, customers as c where e.reportsTo = "Anthony Bow" and c.city = "Brickhaven" or c.city = "Las Vegas" and e.employeeNumber = c.salesRepEmployeeNumber;
+-----+
| name |
+-----+
| Leslie Thompson |
+-----+
1 row in set, 1 warning (0.003 sec)

```