

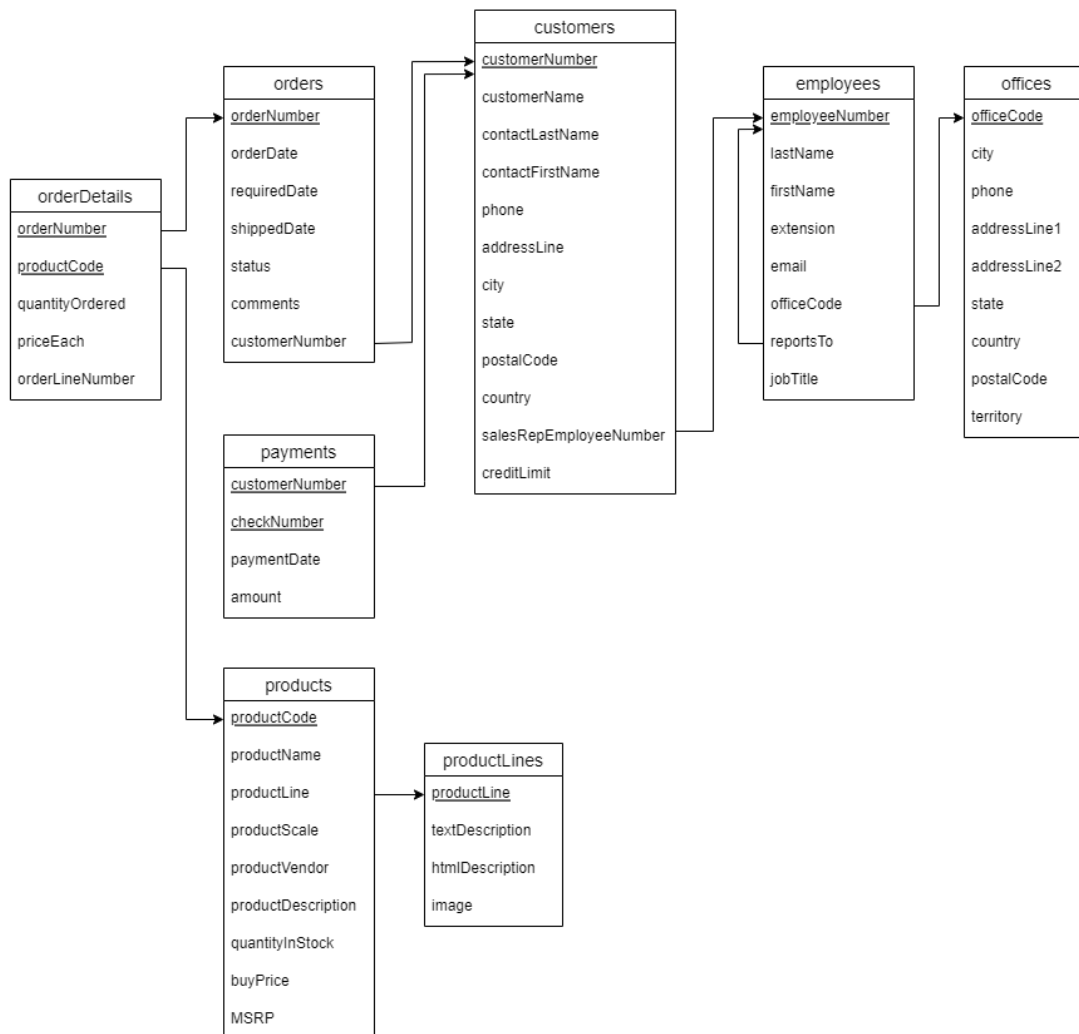
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Lembar Kerja Praktikum 1 IF2240 Basis Data

Materi: SQL (Part 1)

I. Skema Basis Data

Diberikan skema basis data sebagai [berikut](#), yang tersimpan dalam database prak1.



II. 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)
```

2. Buatlah *query* untuk menampilkan seluruh nomor dan nama lengkap pegawai sebagai kolom *fullName* yang melapor kepada atasan yang memiliki jabatan sebagai "Sales Manager (APAC)".

(clue: gunakan CONCAT() untuk menggabungkan beberapa string)

QUERY:

```
select a.employeeNumber, concat(a.firstName, " ", a.lastName) as fullName
from employees as a, employees as b
where a.reportsTo = b.employeeNumber and b.jobTitle = 'Sales Manager (APAC)';
```

SCREENSHOT:

```
MariaDB [prak1]> select a.employeeNumber, concat(a.firstName, " ", a.lastName) as full
lName from employees as a, employees as b where a.reportsTo = b.employeeNumber and b.
jobTitle = 'Sales Manager (APAC)';
+-----+-----+
| employeeNumber | fullName      |
+-----+-----+
|          1611 | Andy Fixter   |
|          1612 | Peter Marsh   |
|          1619 | Tom King      |
+-----+-----+
3 rows in set (0,001 sec)
```

3. Buatlah *query* untuk menampilkan nama produk, harga beli, skala produk, dan vendor produk untuk produk dengan harga beli yang lebih besar dari 15.5 dan lebih kecil dari 50 terurut mengecil berdasarkan harga beli!

QUERY:

```
select productName, buyPrice, productScale, productVendor
-> from products
-> where buyPrice > 15.5 and buyPrice < 50
-> order by buyPrice desc;
```

SCREENSHOT:

```
MariaDB [prak1]> select productName, buyPrice, productScale, productVendor
-> from products
-> where buyPrice > 15.5 and buyPrice < 50
-> order by buyPrice desc;
```

productName	buyPrice	productScale	productVendor
1970 Chevy Chevelle SS 454	49.24	1:24	Unimax Art Galleries
1969 Dodge Super Bee	49.05	1:18	Min Lin Diecast
P-51-D Mustang	49.00	1:72	Gearbox Collectibles
1969 Harley Davidson Ultimate Chopper	48.81	1:10	Min Lin Diecast
1940 Ford Delivery Sedan	48.64	1:24	Carousel DieCast Legends
1949 Jaguar XK 120	47.25	1:24	Classic Metal Creations
1982 Ducati 900 Monster	47.10	1:24	Highway 66 Mini Classics
1912 Ford Model T Delivery Wagon	46.91	1:24	Min Lin Diecast
1982 Camaro Z28	46.53	1:18	Carousel DieCast Legends
The Mayflower	43.30	1:700	Studio M Art Models
1932 Alfa Romeo 8C2300 Spider Sport	43.26	1:18	Exoto Designs
HMS Bounty	39.83	1:700	Unimax Art Galleries
1971 Alpine Renault 1600s	38.58	1:24	Welly Diecast Productions
1962 City of Detroit Streetcar	37.49	1:50	Classic Metal Creations
1960 BSA Gold Star DBD34	37.32	1:24	Highway 66 Mini Classics
American Airlines: MD-11S	36.27	1:700	Second Gear Diecast
1900s Vintage Tri-Plane	36.23	1:24	Unimax Art Galleries
1934 Ford V8 Coupe	34.35	1:18	Min Lin Diecast
1900s Vintage Bi-Plane	34.25	1:24	Autoart Studio Design
1957 Ford Thunderbird	34.21	1:18	Studio M Art Models
1939 Chevrolet Deluxe Coupe	22.57	1:24	Motor City Art Classics
1936 Mercedes Benz 500k Roadster	21.75	1:24	Red Start Diecast
1938 Cadillac V-16 Presidential Limousine	20.61	1:24	Classic Metal Creations
1982 Lamborghini Diablo	16.24	1:24	Second Gear Diecast
1958 Chevy Corvette Limited Edition	15.91	1:24	Carousel DieCast Legends

```
48 rows in set (0,001 sec)
```

4. Buatlah *query* yang menampilkan nama lengkap, jabatan, alamat kantor, serta negara kantor tempat bekerja karyawan yang memiliki nama depan berawalan huruf G dan terdiri dari 6 huruf!

QUERY:

```
select concat(e.firstName, " ", e.lastName) as fullName, e.jobTitle, o.addressLine1,
o.country
from employees as e, offices as o
where e.officeCode = o.officeCode and e.firstName like 'g_____';
```

SCREENSHOT:

```
MariaDB [prak1]> select concat(e.firstName, " ", e.lastName) as fullName, e.jobTitle, o.addressLine1, o.c
ountry from employees as e, offices as o where e.officeCode = o.officeCode and e.firstName like 'g_____';
```

fullName	jobTitle	addressLine1	country
George Vanauf	Sales Rep	523 East 53rd Street	USA
Gerard Bondur	Sale Manager (EMEA)	43 Rue Jouffroy D'abbans	France
Gerard Hernandez	Sales Rep	43 Rue Jouffroy D'abbans	France

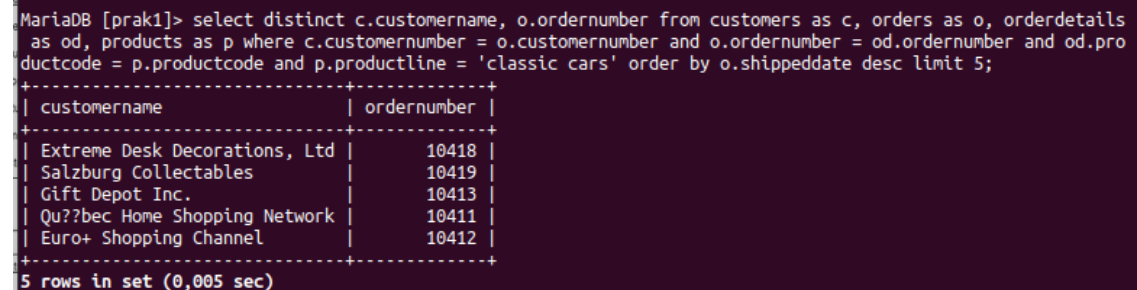
```
3 rows in set (0,001 sec)
```

5. Buatlah *query* untuk menampilkan 5 nama customer yang berbeda beserta nomor pemesanan untuk pesanan kendaraan berjenis "Classic Cars" yang paling baru dikirim! (clue: gunakan LIMIT untuk membatasi banyak data yang ditampilkan)

QUERY:

```
select distinct c.customername, o.ordernumber
from customers as c, orders as o, orderdetails as od, products as p
where c.customernumber = o.customernumber and o.ordernumber = od.ordernumber
and od.productcode = p.productcode
and p.productline = 'classic cars'
order by o.shippeddate desc limit 5;
```

SCREENSHOT:



```
MariaDB [prak1]> select distinct c.customername, o.ordernumber from customers as c, orders as o, orderdetails
as od, products as p where c.customernumber = o.customernumber and o.ordernumber = od.ordernumber and od.pro
ductcode = p.productcode and p.productline = 'classic cars' order by o.shippeddate desc limit 5;
+-----+-----+
| customername | ordernumber |
+-----+-----+
| Extreme Desk Decorations, Ltd | 10418 |
| Salzburg Collectables | 10419 |
| Gift Depot Inc. | 10413 |
| Qu??bec Home Shopping Network | 10411 |
| Euro+ Shopping Channel | 10412 |
+-----+-----+
5 rows in set (0,005 sec)
```

6. Buatlah query untuk menampilkan nama customer dari Singapore yang pernah memesan produk dengan nama "1926 Ford Fire Engine" pada tahun 2004 dan produk dengan nama "Corsair F4U (Bird Cage)" pada tahun 2003

QUERY:

```
(select distinct c.customername as customer_name
-> from customers as c, orders as o, orderdetails as od, products as p
-> where c.customernumber = o.customernumber and o.ordernumber =
od.ordernumber and od.productcode = p.productcode and c.country = 'singapore' and
p.productname = '1926 Ford Fire Engine' and o.orderdate like '2004%')
-> intersect
-> (select distinct c.customername as customer_name
-> from customers as c, orders as o, orderdetails as od, products as p
-> where c.customernumber = o.customernumber and o.ordernumber =
od.ordernumber and od.productcode = p.productcode and c.country = 'singapore' and
p.productname = 'Corsair F4U ( Bird Cage)' and o.orderdate like '2003%');
```

SCREENSHOT:

```

MariaDB [prak1]> (select distinct c.customername as customer_name
-> from customers as c, orders as o, orderdetails as od, products as p
-> where c.customernumber = o.customernumber and o.ordernumber = od.ordernumber and od.productcode = p.pr
oductcode and c.country = 'singapore' and p.productname = '1926 Ford Fire Engine' and o.orderdate like '2004%'
')
-> intersect
-> (select distinct c.customername as customer_name
-> from customers as c, orders as o, orderdetails as od, products as p
-> where c.customernumber = o.customernumber and o.ordernumber = od.ordernumber and od.productcode = p.pr
oductcode and c.country = 'singapore' and p.productname = 'Corsair F4U ( Bird Cage)' and o.orderdate like '20
03%');
Empty set (0,002 sec)

```

7. Buatlah *query* untuk menampilkan seluruh nama produk, waktu pemesanan, dan waktu pengiriman untuk produk yang dikirim lebih dari 30 hari sejak tanggal pemesanan.
 (clue: untuk mendapatkan selisih antara dua waktu, gunakan **TIMESTAMPDIFF(unit, date1, date2)**. Unit dapat diisi dengan **DAY, MONTH, atau YEAR.**)

QUERY:

```

select p.productname, o.orderdate, o.shippeddate
-> from orders as o, orderdetails as od, products as p
-> where o.ordernumber = od.ordernumber and od.productcode =
p.productcode
-> and timestampdiff(day, o.orderdate, o.shippeddate) > 30;

```

SCREENSHOT:

```

MariaDB [prak1]> select p.productname, o.orderdate, o.shippeddate
-> from orders as o, orderdetails as od, products as p
-> where o.ordernumber = od.ordernumber and od.productcode = p.productcode
-> and timestampdiff(day, o.orderdate, o.shippeddate) > 30;
+-----+-----+-----+
| productname | orderdate | shippeddate |
+-----+-----+-----+
| 2001 Ferrari Enzo | 2003-10-22 | 2003-12-26 |
| 1969 Corvair Monza | 2003-10-22 | 2003-12-26 |
| 1969 Ford Falcon | 2003-10-22 | 2003-12-26 |
| 1957 Chevy Pickup | 2003-10-22 | 2003-12-26 |
| 1998 Chrysler Plymouth Prowler | 2003-10-22 | 2003-12-26 |
| 1964 Mercedes Tour Bus | 2003-10-22 | 2003-12-26 |
| 1926 Ford Fire Engine | 2003-10-22 | 2003-12-26 |
| 1992 Ferrari 360 Spider red | 2003-10-22 | 2003-12-26 |
| Collectable Wooden Train | 2003-10-22 | 2003-12-26 |
| 1970 Triumph Spitfire | 2003-10-22 | 2003-12-26 |
| 1970 Dodge Coronet | 2003-10-22 | 2003-12-26 |
| 1962 Volkswagen Microbus | 2003-10-22 | 2003-12-26 |
| 1958 Chevy Corvette Limited Edition | 2003-10-22 | 2003-12-26 |
| 1992 Porsche Cayenne Turbo Silver | 2003-10-22 | 2003-12-26 |
| 1954 Greyhound Scenicruiser | 2003-10-22 | 2003-12-26 |
| 1950's Chicago Surface Lines Streetcar | 2003-10-22 | 2003-12-26 |
| Diamond T620 Semi-Skirted Tanker | 2003-10-22 | 2003-12-26 |
| 1962 City of Detroit Streetcar | 2003-10-22 | 2003-12-26 |
+-----+-----+-----+
18 rows in set (0,007 sec)

```

8. Buatlah *query* untuk menampilkan nama customer dari negara Spain atau Denmark beserta nomor order, tanggal order, dan status order yang dipesan oleh customer tersebut sebelum tahun 2004 dan di luar bulan Maret sampai Agustus
(clue: Gunakan MONTH(date) atau YEAR(date) untuk mengekstrak komponen bulan atau tahun dari tanggal)

QUERY:

```
select c.customername, o.ordernumber, o.orderdate, o.status
from customers as c, orders as o
where c.customernumber = o.customernumber and (year(o.orderdate) < 2004) and
(month(o.orderdate) < 3 or month(o.orderdate) > 8);
```

SCREENSHOT:

```
MariaDB [prak1]> select c.customername, o.ordernumber, o.orderdate, o.status from customers as c, orders as o
where c.customernumber = o.customernumber and (year(o.orderdate) < 2004) and (month(o.orderdate) < 3 or month(o.orderdate) > 8);
```

customername	ordernumber	orderdate	status
Baane Mini Imports	10103	2003-01-29	Shipped
Baane Mini Imports	10158	2003-10-10	Shipped
Mini Gifts Distributors Ltd.	10182	2003-11-12	Shipped
Blauer See Auto, Co.	10101	2003-01-09	Shipped
Blauer See Auto, Co.	10300	2003-10-04	Shipped
Mini Wheels Co.	10201	2003-12-01	Shipped
Land of Toys Inc.	10107	2003-02-24	Shipped
Euro+ Shopping Channel	10104	2003-01-31	Shipped
Euro+ Shopping Channel	10153	2003-09-28	Shipped
Euro+ Shopping Channel	10156	2003-10-08	Shipped
Euro+ Shopping Channel	10190	2003-11-19	Shipped
Euro+ Shopping Channel	10203	2003-12-02	Shipped
Euro+ Shopping Channel	10205	2003-12-03	Shipped
FunGiftIdeas.com	10166	2003-10-21	Shipped
Australian Collectables, Ltd	10193	2003-11-21	Shipped
Frau da Collezione	10157	2003-10-09	Shipped
West Coast Collectables Co.	10199	2003-12-01	Shipped
Iberia Gift Imports, Corp.	10184	2003-11-14	Shipped
Signal Collectibles Ltd.	10149	2003-09-12	Shipped
Double Decker Gift Stores, Ltd	10186	2003-11-14	Shipped
Diecast Collectables	10207	2003-12-09	Shipped
Kelly's Gift Shop	10179	2003-11-11	Cancelled

73 rows in set (0,003 sec)

9. Perusahaan berencana untuk memberikan bonus limit kredit sebesar 13000 kepada para pelanggan istimewa. Terdapat dua kondisi untuk menjadikan seorang pelanggan berstatus istimewa, yaitu:
- Nama belakang kontak pelanggan sama dengan nama belakang pegawai yang melayaninya, **atau**
 - Kode pos pelanggan sama dengan kode pos kantor tempat bekerja pegawai yang melayaninya

Buatlah *query* untuk menampilkan nama pelanggan istimewa dan limit kreditnya setelah penambahan bonus sebagai kolom *newCreditLimit!*

QUERY:

```
(select c.customername, c.creditlimit + 13000
-> from customers as c, employees as e
-> where c.contactlastname = e.lastname)
-> union
-> (select c.customername, c.creditlimit + 13000
-> from customers as c, employees as e
-> where c.postalcode = e.officecode);
```

SCREENSHOT:

```
MariaDB [prak1]> (select c.customername, c.creditlimit + 13000
-> from customers as c, employees as e
-> where c.contactlastname = e.lastname)
-> union
-> (select c.customername, c.creditlimit + 13000
-> from customers as c, employees as e
-> where c.postalcode = e.officecode);
```

customername	c.creditlimit + 13000
Signal Gift Stores	84800.00
Mini Wheels Co.	77600.00
Cambridge Collectables Co.	56400.00
Gift Depot Inc.	97300.00
Collectable Mini Designs Co.	118000.00
Marta's Replicas Co.	136700.00
Classic Legends Inc.	80500.00
Super Scale Inc.	108400.00
West Coast Collectables Co.	68400.00
Clover Collections, Co.	82400.00

```
10 rows in set (0,002 sec)
```