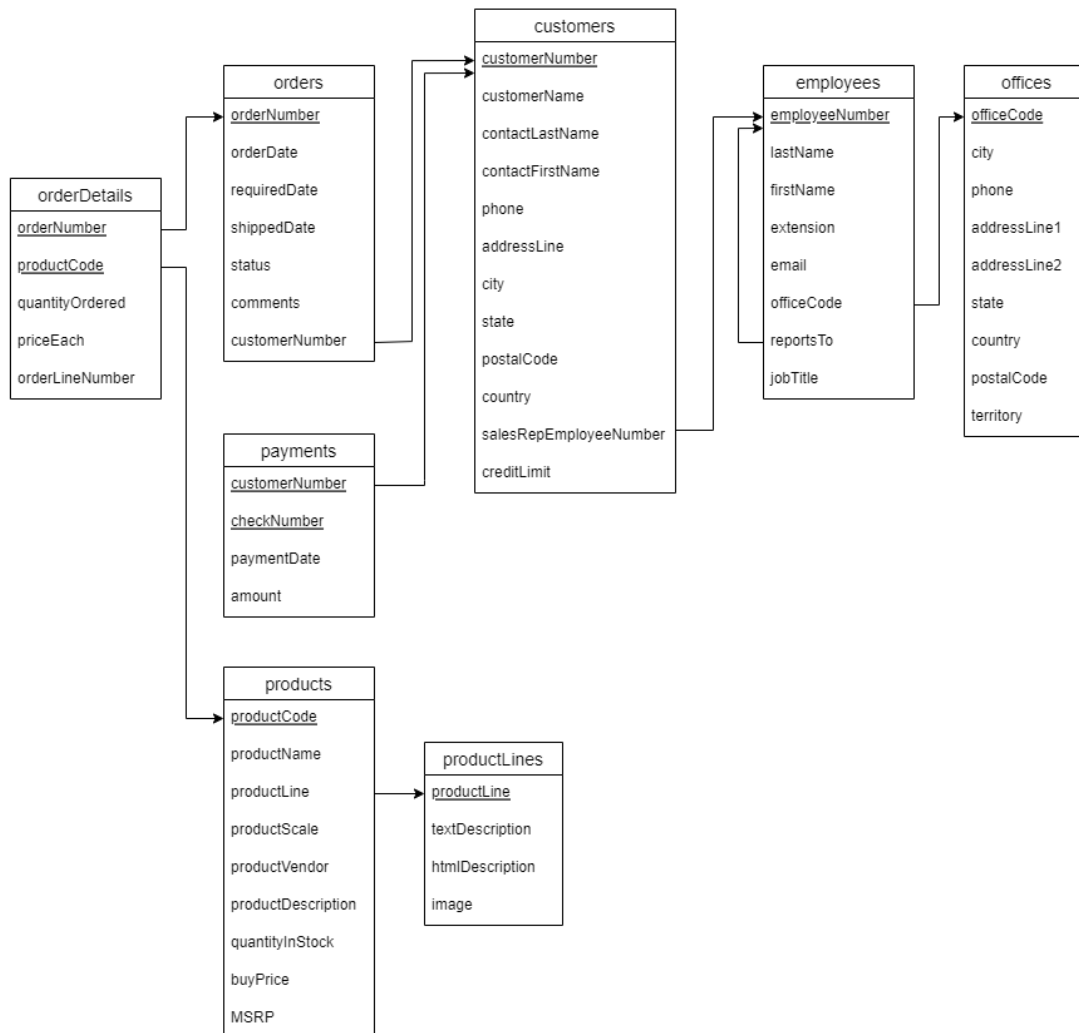


Pembahasan Praktikum 1 IF2240 Basis Data

Materi: SQL (Part 1)

I. Skema Basis Data

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



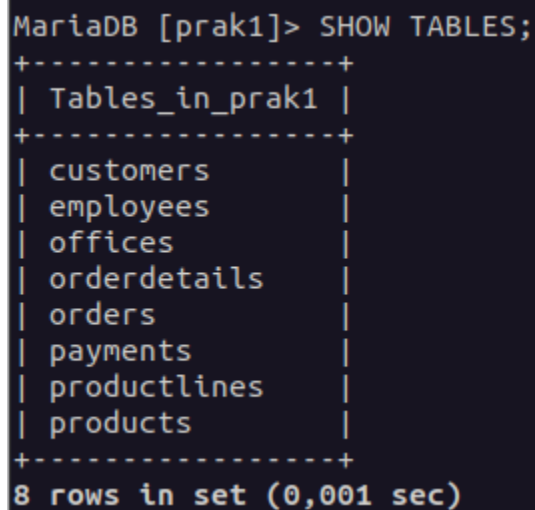
II. Soal Praktikum

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

ALTERNATIF 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)
```

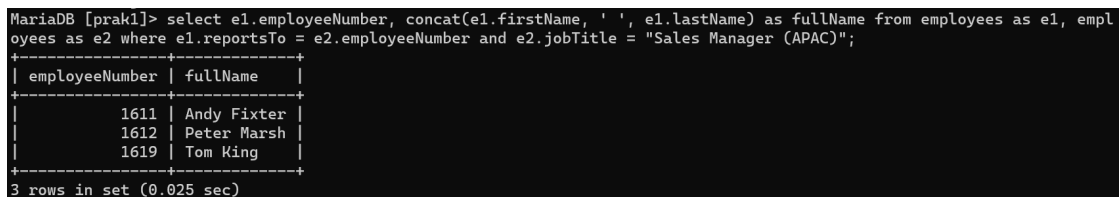
2. Buatlah *query* untuk menampilkan seluruh nomor dan nama lengkap pegawai sebagai kolom *fullName* yang melapor kepada atasan yang memiliki jabatan sebagai “Sales Manager (APAC)”.

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

ALTERNATIF QUERY:

```
SELECT e1.employeeNumber, concat(e1.firstName, ' ', e1.lastName) AS fullName
FROM employees AS e1, employees AS e2
WHERE e1.reportsTo = e2.employeeNumber AND e2.jobTitle = "Sales Manager (APAC)";
```

SCREENSHOT:



```
MariaDB [prak1]> select e1.employeeNumber, concat(e1.firstName, ' ', e1.lastName) as fullName from employees as e1, employees as e2 where e1.reportsTo = e2.employeeNumber and e2.jobTitle = "Sales Manager (APAC)";
+-----+-----+
| employeeNumber | fullName |
+-----+-----+
| 1611          | Andy Fixter |
| 1612          | Peter Marsh |
| 1619          | Tom King   |
+-----+-----+
3 rows in set (0.025 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!

ALTERNATIF 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;
```

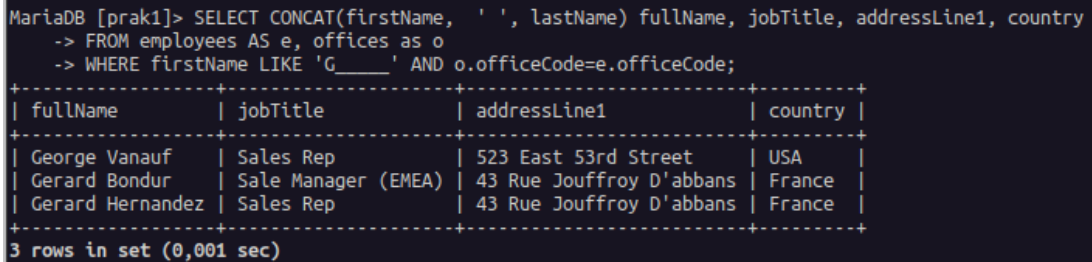
productName	buyPrice	productScale	productVendor
1970 Chevy Chevelle SS 454	49.24	1:24	Unimax Art Galleries
1969 Dodge Super Bee	49.05	1:18	Min Lin Diecast
P-51-D Mustang	49.00	1:72	Gearbox Collectibles
1969 Harley Davidson Ultimate Chopper	48.81	1:10	Min Lin Diecast
1940 Ford Delivery Sedan	48.64	1:24	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
2002 Yamaha YZR M1	34.17	1:50	Autoart Studio Design
The Schooner Bluenose	34.00	1:700	Autoart Studio Design
The USS Constitution Ship	33.97	1:700	Red Start Diecast
1996 Peterbilt 379 Stake Bed with Outrigger	33.61	1:32	Red Start Diecast
Pont Yacht	33.30	1:72	Unimax Art Galleries
1911 Ford Town Car	33.30	1:18	Motor City Art Classics
1928 Ford Phaeton Deluxe	33.02	1:32	Highway 66 Mini Classics
1957 Vespa GS150	32.95	1:18	Studio M Art Models
Boeing X-32A JSF	32.77	1:72	Motor City Art Classics
1970 Dodge Coronet	32.37	1:24	Highway 66 Mini Classics
1961 Chevrolet Impala	32.33	1:18	Classic Metal Creations
1970 Plymouth Hemi Cuda	31.92	1:12	Studio M Art Models
Corsair F4U (Bird Cage)	29.34	1:24	Second Gear Diecast
1966 Shelby Cobra 427 S/C	29.18	1:24	Carousel DieCast Legends
1930 Buick Marquette Phaeton	27.06	1:50	Studio M Art Models
1950's Chicago Surface Lines Streetcar	26.72	1:32	Gearbox Collectibles
1937 Horch 930V Limousine	26.30	1:24	Autoart Studio Design
1954 Greyhound Scenicruiser	25.98	1:32	Classic Metal Creations
1926 Ford Fire Engine	24.92	1:18	Carousel DieCast Legends
1936 Mercedes-Benz 500K Special Roadster	24.26	1:18	Studio M Art Models
1936 Harley Davidson El Knucklehead	24.23	1:18	Welly Diecast Productions
1982 Ducati 996 R	24.14	1:32	Gearbox Collectibles
1939 Cadillac Limousine	23.14	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)

- Buatlah *query* yang menampilkan nama lengkap, jabatan, alamat kantor (addressLine1), serta negara kantor tempat bekerja karyawan yang memiliki nama depan berawalan huruf G dan terdiri dari 6 huruf!

ALTERNATIF QUERY:

```
SELECT CONCAT(firstName, ' ', lastName) fullName, jobTitle, addressLine1, country
FROM employees AS e, offices as o
WHERE firstName LIKE 'G_____' AND o.officeCode=e.officeCode;
```

SCREENSHOT:

```
MariaDB [prak1]> SELECT CONCAT(firstName, ' ', lastName) fullName, jobTitle, addressLine1, country
-> FROM employees AS e, offices as o
-> WHERE firstName LIKE 'G_____' AND o.officeCode=e.officeCode;
+-----+-----+-----+-----+
| 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)
```

Note: karena tidak ada ketentuan nama kolom untuk nama lengkap karyawan, nama kolom tersebut dibebaskan dalam penilaian. Ketentuan juga dibebaskan pada alamat kantor (boleh menggunakan addressLine1, addressLine2, ataupun keduanya).

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)

ALTERNATIF 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.productCode = 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 (0,011 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

ALTERNATIF QUERY:

```

(SELECT DISTINCT customerName
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.productName = "1926 Ford Fire Engine"
    AND c.country = "Singapore"
    AND YEAR(o.orderDate) = 2004
)
INTERSECT
(SELECT DISTINCT customerName
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.productName = "Corsair F4U ( Bird Cage)"
AND c.country = "Singapore"
AND YEAR(o.orderDate) = 2003
);
```

SCREENSHOT:

```
MariaDB [prak1]> (SELECT DISTINCT customerName
-> 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.productName = "1926 Ford Fire Engine"
-> AND c.country = "Singapore"
-> AND YEAR(o.orderDate) = 2004
-> )
-> INTERSECT
-> (SELECT DISTINCT customerName
-> 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.productName = "Corsair F4U ( Bird Cage)"
-> AND c.country = "Singapore"
-> AND YEAR(o.orderDate) = 2003
-> );
Empty set (0.001 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`.)

ALTERNATIF QUERY:

```
SELECT productName, orderDate, shippedDate
FROM orders AS o, orderdetails AS od, products AS p
WHERE o.orderNumber = od.orderNumber AND od.productCode = p.productCode AND
TIMESTAMPDIFF(DAY, orderDate, shippedDate) > 30;
```

SCREENSHOT:

```

MariaDB [prak1]> SELECT productName, orderDate, shippedDate
-> FROM orders AS o, orderdetails AS od, products AS p
-> WHERE o.orderNumber = od.orderNumber AND od.productCode = p.productCode AND TIMESTAMPDIFF(DAY, orderDate, 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 (0,008 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)

ALTERNATIF QUERY:

```

(SELECT customerName, country, orderNumber, orderDate, status
FROM customers AS c, orders AS o
WHERE c.customerNumber = o.customerNumber
AND YEAR(orderDate) < 2004 AND (country = 'Spain' OR country = 'Denmark'))
EXCEPT
(SELECT customerName, country, orderNumber, orderDate, status
FROM customers AS c, orders AS o
WHERE c.customerNumber = o.customerNumber
AND MONTH(orderDate) BETWEEN 3 AND 8 AND YEAR(orderDate) = 2002 AND (country = 'Spain' OR country = 'Denmark'));

```

SCREENSHOT:

```

MariaDB [prak1]> (SELECT customerName, country, orderNumber, orderDate, status
-> FROM customers AS c, orders AS o
-> WHERE c.customerNumber = o.customerNumber
-> AND YEAR(orderDate) < 2004 AND (country = 'Spain' OR country = 'Denmark'))
-> EXCEPT
-> (SELECT customerName, country, orderNumber, orderDate, status
-> FROM customers AS c, orders AS o
-> WHERE c.customerNumber = o.customerNumber
-> AND MONTH(orderDate) BETWEEN 3 AND 8 AND YEAR(orderDate) = 2002 AND (country = 'Spain' OR country = 'Denmark'))
);
+-----+-----+-----+-----+-----+
| customerName | country | orderNumber | orderDate | status |
+-----+-----+-----+-----+-----+
| Euro+ Shopping Channel | Spain | 10104 | 2003-01-31 | Shipped |
| Euro+ Shopping Channel | Spain | 10128 | 2003-06-06 | Shipped |
| Euro+ Shopping Channel | Spain | 10133 | 2003-06-27 | Shipped |
| Euro+ Shopping Channel | Spain | 10153 | 2003-09-28 | Shipped |
| Euro+ Shopping Channel | Spain | 10156 | 2003-10-08 | Shipped |
| Euro+ Shopping Channel | Spain | 10190 | 2003-11-19 | Shipped |
| Euro+ Shopping Channel | Spain | 10203 | 2003-12-02 | Shipped |
| Euro+ Shopping Channel | Spain | 10205 | 2003-12-03 | Shipped |
| Danish Wholesale Imports | Denmark | 10105 | 2003-02-11 | Shipped |
| Enaco Distributors | Spain | 10118 | 2003-04-21 | Shipped |
| Enaco Distributors | Spain | 10197 | 2003-11-26 | Shipped |
| Heintze Collectables | Denmark | 10161 | 2003-10-17 | Shipped |
| CAF Imports | Spain | 10177 | 2003-11-07 | Shipped |
| Corrida Auto Replicas, Ltd | Spain | 10126 | 2003-05-28 | Shipped |
| Iberia Gift Imports, Corp. | Spain | 10184 | 2003-11-14 | Shipped |
+-----+-----+-----+-----+-----+
15 rows in set (0,001 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*!

ALTERNATIF QUERY:

```

SELECT customerName, creditLimit + 13000 as newCreditLimit
FROM customers as c, employees as e, offices as o
WHERE c.salesRepEmployeeNumber = e.employeeNumber and e.officeCode =
o.officeCode and (c.contactLastName = e.lastName or c.postalCode =
o.postalCode);

```

SCREENSHOT:


```
MariaDB [prak1]> SELECT customerName, creditLimit + 13000 as newCreditLimit
-> FROM customers as c, employees as e, offices as o
-> WHERE c.salesRepEmployeeNumber = e.employeeNumber and e.officeCode = o.officeCode and (c.contactLastName = e.lastName or c.postalCode = o.postalCode);
```

customerName	newCreditLimit
Collectable Mini Designs Co.	118000.00
West Coast Collectables Co.	68400.00
Muscle Machine Inc	151500.00
Vitachrome Inc.	89400.00
Classic Legends Inc.	80500.00
Microscale Inc.	52800.00
Land of Toys Inc.	127900.00

7 rows in set (0,001 sec)

III. Soal Susulan Praktikum

1. Buatlah query untuk menampilkan seluruh isi dari tabel offices!

ALTERNATIF QUERY:
SELECT * FROM offices;

SCREENSHOT:

```
MariaDB [prak1]> select * from offices;
```

officeCode	city	phone	addressLine1	addressLine2	state	country	postalCode	territory
1	San Francisco	+1 650 219 4782	100 Market Street	Suite 300	CA	USA	94080	NA
2	Boston	+1 215 837 0825	1550 Court Place	Suite 102	MA	USA	02107	NA
3	NYC	+1 212 555 3000	523 East 53rd Street	apt. 5A	NY	USA	10022	NA
4	Paris	+33 14 723 4404	43 Rue Jouffroy D'abbans	NULL	NULL	France	75017	EMEA
5	Tokyo	+81 33 224 5000	4-1 Kioicho	NULL	Chiyoda-Ku	Japan	102-8578	Japan
6	Sydney	+61 2 9264 2451	5-11 Wentworth Avenue	Floor #2	NULL	Australia	NSW 2010	APAC
7	London	+44 20 7877 2041	25 Old Broad Street	Level 7	NULL	UK	EC2N 1HN	EMEA

7 rows in set (0,001 sec)

2. Buatlah query untuk menampilkan nama kota, state, dan negara dari tabel customer dengan state yang tidak null, tapi bukan berasal dari negara USA!

ALTERNATIF QUERY:
select city, state, country from customers where state is not null and country != 'USA';

SCREENSHOT:

```
MariaDB [prak1]> select city, state, country from customers where state is not null and country != 'USA';
+-----+-----+-----+
| city      | state    | country |
+-----+-----+-----+
| Melbourne | Victoria | Australia |
| Kita-ku   | Osaka    | Japan     |
| Vancouver | BC        | Canada    |
| Montr??al | Qu??bec  | Canada    |
| Cowes     | Isle of Wight | UK       |
| Tsawassen | BC        | Canada    |
| North Sydney | NSW      | Australia |
| Chatswood | NSW       | Australia |
| South Brisbane | Queensland | Australia |
| Cork      | Co. Cork  | Ireland   |
| Hatfield  | Pretoria | South Africa |
| Minato-ku | Tokyo     | Japan     |
| Glen Waverly | Victoria | Australia |
+-----+-----+-----+
13 rows in set (0,001 sec)

MariaDB [prak1]>
```

3. Buatlah query untuk menampilkan kode produk, nama produk, kuantitas tersedia, dan harga beli dari produk dengan nama yang mengandung kata 'Ford', 'Ferrari', 'Pont', atau 'Bus'. Urutkan membesar berdasarkan harga beli, lalu mengecil berdasarkan kuantitas tersedia.

ALTERNATIF QUERY:

```
SELECT productCode, productName, quantityInStock, buyPrice
FROM products
WHERE productName like '%Ford%'
OR productName like '%Ferrari%'
OR productName like '%Pont%'
OR productName like '%Bus%'
ORDER BY buyPrice ASC, quantityInStock DESC;
```

SCREENSHOT:

```

MariaDB [prak1]> SELECT productCode, productName, quantityInStock, buyPrice
-> FROM products
-> WHERE productName like '%Ford%'
-> OR productName like '%Ferrari%'
-> OR productName like '%Pont%'
-> OR productName like '%Bus%'
-> ORDER BY buyPrice ASC, quantityInStock DESC;

```

productCode	productName	quantityInStock	buyPrice
S18_2432	1926 Ford Fire Engine	2018	24.92
S32_4289	1928 Ford Phaeton Deluxe	136	33.02
S18_2248	1911 Ford Town Car	540	33.30
S72_3212	Pont Yacht	414	33.30
S18_4933	1957 Ford Thunderbird	3209	34.21
S18_2957	1934 Ford V8 Coupe	5649	34.35
S24_3151	1912 Ford Model T Delivery Wagon	9173	46.91
S24_3816	1940 Ford Delivery Sedan	6621	48.64
S18_1097	1940 Ford Pickup Truck	2613	58.33
S18_2325	1932 Model A Ford J-Coupe	9354	58.48
S18_2949	1913 Ford Model T Speedster	4189	60.78
S24_2300	1962 Volkswagen Microbus	2327	61.34
S18_3140	1903 Ford Model A	3913	68.30
S18_3482	1976 Ford Gran Torino	9127	73.49
S18_2319	1964 Mercedes Tour Bus	8258	74.86
S18_3232	1992 Ferrari 360 Spider red	8347	77.90
S12_1666	1958 Setra Bus	1579	77.90
S12_3891	1969 Ford Falcon	1049	83.05
S18_4600	1940s Ford truck	3128	84.76
S12_1099	1968 Ford Mustang	68	95.34
S12_1108	2001 Ferrari Enzo	3619	95.59

21 rows in set (0,001 sec)

4. Buatlah query untuk menampilkan nama customer serta nama kontak dari tabel customers dengan nama customer berakhiran 'Co.' dan nama depan kontak terdiri dari 4 huruf! nama kontak adalah nama lengkap, yaitu nama depan dan belakang disatukan sebagai kolom contactName. (clue: gunakan CONCAT() untuk menyatukan string)

ALTERNATIF QUERY:

```

SELECT customerName, CONCAT(contactFirstName, ' ', contactLastName) as
contactName
FROM customers
WHERE customerName like '%Co.' and contactFirstName like '____';

```

SCREENSHOT:

```
MariaDB [prak1]> select customerName, CONCAT(contactFirstName, ' ', contactLastName) as contactName from customers where customerName like '%Co.' and contactFirstName like '____';
```

customerName	contactName
Osaka Souveniers Co.	Mory Kentary
Clover Collections, Co.	Dean Cassidy
King Kong Collectables, Co.	Mike Gao
Boards & Toys Co.	Mary Young
Stylish Desk Decors, Co.	Ann Brown

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

5. Buatlah query untuk menampilkan kode kantor dan nomor telepon yang berbeda dari kantor tempat bekerja pegawai yang pernah melayani pelanggan dengan limit kredit antara 100000 dan 150000 dan memiliki data negara tidak kosong.

ALTERNATIF QUERY:

```
SELECT DISTINCT o.officeCode, o.phone
FROM offices as o, employees as e, customers as c
WHERE o.officeCode = e.officeCode
AND e.employeeNumber = c.salesRepEmployeeNumber
AND c.creditLimit BETWEEN 100000 AND 150000
AND c.state IS NOT NULL;
```

SCREENSHOT:

```
MariaDB [prak1]> SELECT DISTINCT o.officeCode, o.phone
-> FROM offices as o, employees as e, customers as c
-> WHERE o.officeCode = e.officeCode
-> AND e.employeeNumber = c.salesRepEmployeeNumber
-> AND c.creditLimit BETWEEN 100000 AND 150000
-> AND c.state IS NOT NULL;
```

officeCode	phone
1	+1 650 219 4782
2	+1 215 837 0825
3	+1 212 555 3000
6	+61 2 9264 2451

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

6. Buatlah *query* untuk menampilkan 15 nomor customer beserta nomor cek dan jumlah pembayarannya dari customer yang memiliki jumlah pembayaran yang lebih tinggi daripada satu atau beberapa customer lainnya. Hasil ditampilkan terurut membesar berdasarkan jumlah pembayaran.

(clue: gunakan LIMIT untuk membatasi banyak data yang ditampilkan)

ALTERNATIF QUERY:

```
SELECT DISTINCT p.customerNumber, p.checkNumber, p.amount
FROM payments as p, payments as r
WHERE p.amount > r.amount
ORDER BY amount LIMIT 15;
```

SCREENSHOT:

```
MariaDB [prak1]> SELECT DISTINCT p.customerNumber, p.checkNumber, p.amount  
-> FROM payments as p, payments as r  
-> WHERE p.amount > r.amount  
-> ORDER BY amount LIMIT 15;
```

customerNumber	checkNumber	amount
381	MS154481	1128.20
121	FD317790	1491.38
381	CC475233	1627.56
103	OM314933	1676.14
456	MO743231	1679.92
350	OB648482	1834.56
172	AD832091	1960.80
161	BR352384	2434.25
148	DD635282	2611.84
323	HG738664	2880.00
216	BG407567	3101.40
219	BN17870	3452.75
484	GK294076	3474.66
148	ME497970	3516.04
205	GL756480	3879.96

15 rows in set (0,053 sec)

7. Buatlah query untuk menampilkan nama pelanggan yang orderannya dalam status "On Hold", lengkap dengan komentar dan tanggal ordernya serta nama produk yang dipesan.

ALTERNATIF QUERY:

```
SELECT customerName, orderdate, status, comments, productName  
FROM customers as c, orderdetails as od, products as p, orders as o  
WHERE c.customerNumber = o.customerNumber AND o.status = "On Hold" AND  
o.orderNumber = od.orderNumber AND od.productCode = p.productCode;
```

SCREENSHOT:

```

MariaDB [prakt1]> SELECT customerName, orderdate, status, comments, productName
-> FROM customers as c, orderdetails as od, products as p, orders as o
-> WHERE c.customerNumber = o.customerNumber AND o.status = "On Hold" AND o.orderNumber = od.orderNumber AND od.productCode = p.productCode;

```

customerName	orderdate	status	comments	productName
Volvo Model Replicas, Co	2004-11-19	On Hold	The outstanding balance for this customer exceeds their credit limit. Order will be shipped when a payment is received.	1962 Lancia Delta 16V
Volvo Model Replicas, Co	2004-11-19	On Hold	The outstanding balance for this customer exceeds their credit limit. Order will be shipped when a payment is received.	1964 Mercedes Tour Bus
Volvo Model Replicas, Co	2004-11-19	On Hold	The outstanding balance for this customer exceeds their credit limit. Order will be shipped when a payment is received.	1926 Ford Fire Engine
Volvo Model Replicas, Co	2004-11-19	On Hold	The outstanding balance for this customer exceeds their credit limit. Order will be shipped when a payment is received.	1992 Ferrari 360 Spider red
Volvo Model Replicas, Co	2004-11-19	On Hold	The outstanding balance for this customer exceeds their credit limit. Order will be shipped when a payment is received.	1940s Ford truck
Volvo Model Replicas, Co	2004-11-19	On Hold	The outstanding balance for this customer exceeds their credit limit. Order will be shipped when a payment is received.	1962 Volkswagen Microbus
Tekni Collectables Inc.	2005-04-03	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	P-51 D Mustang
Tekni Collectables Inc.	2005-04-03	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	1928 British Royal Navy Airplane
Tekni Collectables Inc.	2005-04-03	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	Corsair F4U (Bird Cage)
Tekni Collectables Inc.	2005-04-03	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	1980s Vintage Tri-Plane
Tekni Collectables Inc.	2005-04-03	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	1977 BMW 520i ST
Tekni Collectables Inc.	2005-04-03	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	1928 Ford Phaeton Deluxe
Tekni Collectables Inc.	2005-04-03	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	1930 Buick Marquette Phaeton
Tekni Collectables Inc.	2005-04-03	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	American Airlines; B767-300
Tekni Collectables Inc.	2005-04-03	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	America West Airlines B757-200
Tekni Collectables Inc.	2005-04-03	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	ATA: B757-300
Tekni Collectables Inc.	2005-04-03	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	F/A B Hornet 1/72
Tekni Collectables Inc.	2005-04-03	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	American Airlines; MD-115
Gifts4AllAges.com	2005-05-06	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	1972 Alfa Romeo GTA
Gifts4AllAges.com	2005-05-06	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	1999 Vanhoo Speed Boat
Gifts4AllAges.com	2005-05-06	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	1993 Ford Model A
Gifts4AllAges.com	2005-05-06	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	Collectable Wooden Train
Gifts4AllAges.com	2005-05-06	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	1904 Buick Runabout
Gifts4AllAges.com	2005-05-06	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	18th century schooner
Gifts4AllAges.com	2005-05-06	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	1912 Ford Model T Delivery Wagon
Gifts4AllAges.com	2005-05-06	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	1940 Ford Delivery Sedan
Gifts4AllAges.com	2005-05-06	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	The Schooner Bluenose
Gifts4AllAges.com	2005-05-06	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	The Mayflower
Gifts4AllAges.com	2005-05-06	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	The USS Constitution Ship
Gifts4AllAges.com	2005-05-06	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	The Titanic
Gifts4AllAges.com	2005-05-06	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	The Queen Mary
Gifts4AllAges.com	2005-05-06	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	Pont Yacht
The Sharp Gifts Warehouse	2005-04-22	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	1965 Aston Martin DB5
The Sharp Gifts Warehouse	2005-04-22	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	1917 Grand Touring Sedan
The Sharp Gifts Warehouse	2005-04-22	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	1911 Ford Town Car
The Sharp Gifts Warehouse	2005-04-22	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	1999 Indy 500 Monte Carlo SS
The Sharp Gifts Warehouse	2005-04-22	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	1932 Alfa Romeo 8C2300 Spider Sport
The Sharp Gifts Warehouse	2005-04-22	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	1957 Ford Thunderbird
The Sharp Gifts Warehouse	2005-04-22	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	1970 Chevy Chevelle SS 454
The Sharp Gifts Warehouse	2005-04-22	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	1966 Shelby cobra 427 5/c
The Sharp Gifts Warehouse	2005-04-22	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	1949 Jaguar XK 120
The Sharp Gifts Warehouse	2005-04-22	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	1952 Citroen-15CV
The Sharp Gifts Warehouse	2005-04-22	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	1969 Chevrolet Camaro Z28
The Sharp Gifts Warehouse	2005-04-22	On Hold	Customer credit limit exceeded. Will ship when a payment is received.	2002 Chevy Corvette

44 rows in set (0,002 sec)

Note : Karena dalam soal tidak secara eksplisit disebutkan harus tampilkan kolom status, jadi bebas mau ditampilkan/tidak

- Buatlah query untuk menampilkan nama lengkap pegawai beserta dengan nama kota dan alamat kantor (addressLine1) dari pegawai yang pernah melayani pelanggan yang mengandung nama "Mini." Tampilkan data secara unik (tidak ada nama pegawai yang berulang)

ALTERNATIF QUERY:

```

SELECT DISTINCT lastName, firstName, o.addressLine1, o.city
FROM customers as c, employees as e, offices as o
WHERE c.salesRepEmployeeNumber = e.employeeNumber AND customerName Like
"%Mini%" AND e.officeCode = o.officeCode;

```

SCREENSHOT:

```

MariaDB [prakt1]> SELECT DISTINCT lastName, firstName, o.addressLine1, o.city
-> FROM customers as c, employees as e, offices as o
-> WHERE c.salesRepEmployeeNumber = e.employeeNumber AND customerName Like "%Mini%" AND e.officeCode = o.officeCode;

```

lastName	firstName	addressLine1	city
Jennings	Leslie	100 Market Street	San Francisco
Thompson	Leslie	100 Market Street	San Francisco
Firrelli	Julie	1550 Court Place	Boston
Vanauf	George	523 East 53rd Street	NYC
Bondur	Loui	43 Rue Jouffroy D'abbans	Paris
Hernandez	Gerard	43 Rue Jouffroy D'abbans	Paris
Castillo	Pamela	43 Rue Jouffroy D'abbans	Paris
Jones	Barry	25 Old Broad Street	London

8 rows in set (0,001 sec)

- Buatlah query untuk menampilkan nama pelanggan dari kota London yang pernah memesan produk dengan nama "Pont Yacht" pada tahun 2004 atau pernah memesan produk dengan productLine nama "Vintage Cars" pada tahun 2003.

ALTERNATIF QUERY:

```
(SELECT DISTINCT customerName
FROM
    customers as c,
    orders as o,
    orderdetails as od,
    products as p
WHERE
    p.productName = "Pont Yacht"
    AND c.city = "London"
    AND YEAR(o.orderDate) = 2004
)
UNION
(SELECT DISTINCT customerName
FROM
    customers as c,
    orders as o,
    orderdetails as od,
    products as p
WHERE
    p.productLine = "Vintage Cars"
    AND c.city = "London"
    AND YEAR(o.orderDate) = 2003
);
```

SCREENSHOT:

```
MariaDB [prak1]> (SELECT DISTINCT customerName
```

```
-> FROM
```

```
-> customers as c,
```

```
-> orders as o,
```

```
-> orderdetails as od,
```

```
-> products as p
```

```
-> WHERE
```

```
-> p.productName = "Pont Yacht"
```

```
-> AND c.city = "London"
```

```
-> AND YEAR(o.orderDate) = 2004
```

```
-> )
```

```
-> UNION
```

```
-> (SELECT DISTINCT customerName
```

```
-> FROM
```

```
-> customers as c,
```

```
-> orders as o,
```

```
-> orderdetails as od,
```

```
-> products as p
```

```
-> WHERE
```

```
-> p.productLine = "Vintage Cars"
```

```
-> AND c.city = "London"
```

```
-> AND YEAR(o.orderDate) = 2003
```

```
-> );
```

```
+-----+  
| customerName |  
+-----+  
| Stylish Desk Decors, Co. |  
| Double Decker Gift Stores, Ltd |  
+-----+  
2 rows in set (13,361 sec)
```