Nama	:	Levi Rizki Saputra
Kelas	:	IF-D
NIM	:	123230127

1. Tampilkan employee yang memiliki nama depan gerard dan memiliki job sebagai Sales Rep

```
SELECT * FROM employees WHERE
        firstName = "gerard" AND
        jobTitle = "Sales Rep";
```

```
+----------------+-----------+-----------+-----------+------------------------------+------------+-----------+-----------+
| employeeNumber | lastName  | firstName | extension | email                        | officeCode | reportsTo | jobTitle  |
+----------------+-----------+-----------+-----------+------------------------------+------------+-----------+-----------+
|           1370 | Hernandez | Gerard    | x2028     | ghernande@classicmodelcars.com | 4        |      1102 | Sales Rep |
+----------------+-----------+-----------+-----------+------------------------------+------------+-----------+-----------+
1 row in set (0,00 sec)
```
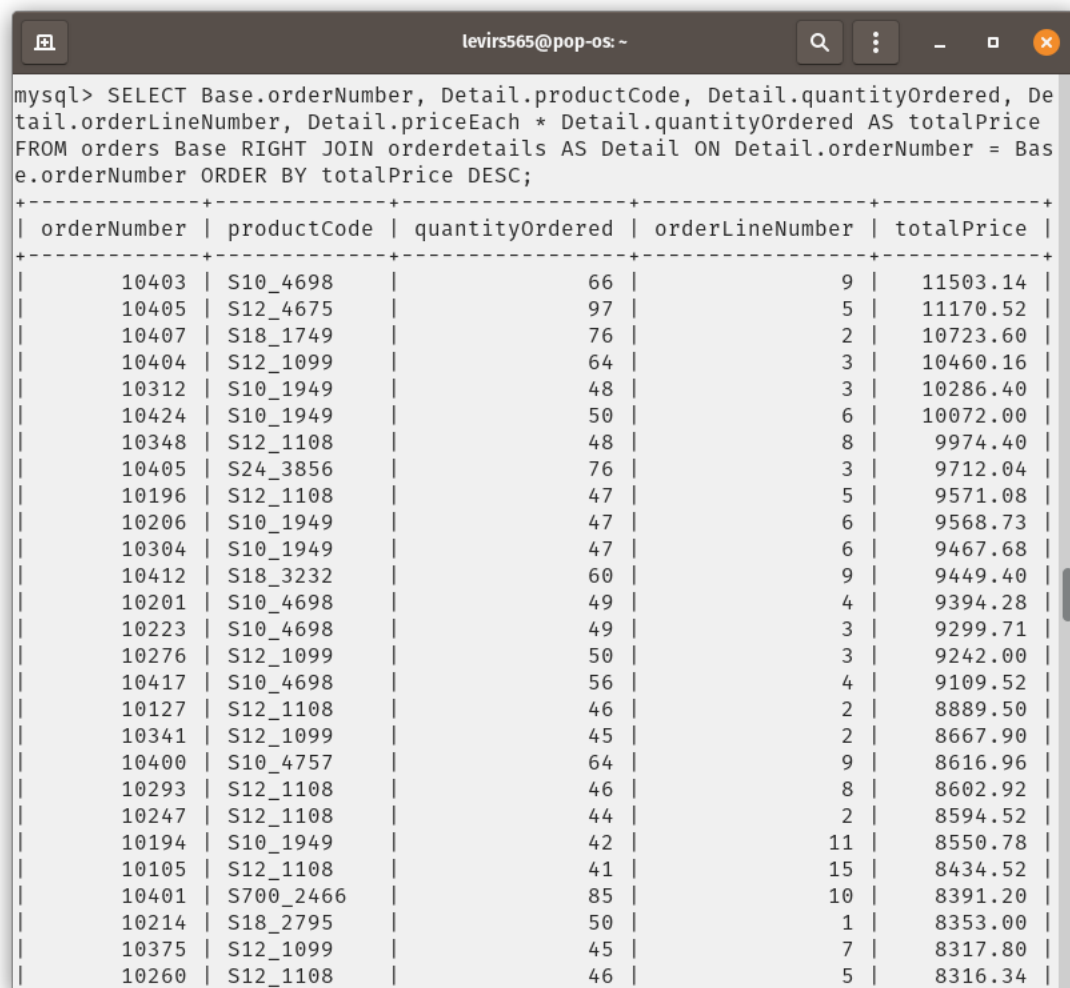

2. Tampilkan order number, product code, jumlah order, order line number, beserta total harganya diurutkan berdasarkan total harganya besar ke kecil

Relasi antara orders dan orderdetails adalah one (orders) to many (orderdetails).

```
SELECT
        Base.orderNumber,
        Detail.productCode,
        Detail.quantityOrdered,
        Detail.orderLineNumber,
        Detail.priceEach * Detail.quantityOrdered AS totalPrice
FROM orders Base
        RIGHT JOIN orderdetails AS Detail
                ON Detail.orderNumber = Base.orderNumber
ORDER BY totalPrice DESC
```

```
+-------------+-------------+-----------------+-----------------+------------+
| orderNumber | productCode | quantityOrdered | orderLineNumber | totalPrice |
+-------------+-------------+-----------------+-----------------+------------+
|       10403 | S10_4698    |              66 |               9 |   11503.14 |
|       10405 | S12_4675    |              97 |               5 |   11170.52 |
|       10407 | S18_1749    |              76 |               2 |   10723.60 |
|       10404 | S12_1099    |              64 |               3 |   10460.16 |
|       10312 | S10_1949    |              48 |               3 |   10286.40 |
|       10424 | S10_1949    |              50 |               6 |   10072.00 |
|       10348 | S12_1108    |              48 |               8 |    9974.40 |
|       10405 | S24_3856    |              76 |               3 |    9712.04 |
|       10196 | S12_1108    |              47 |               5 |    9571.08 |
|       10206 | S10_1949    |              47 |               6 |    9568.73 |
|       10304 | S10_1949    |              47 |               6 |    9467.68 |
|       10412 | S18_3232    |              60 |               9 |    9449.40 |
```

1

10201	S10_4698	49	4	9394.28
10223	S10_4698	49	3	9299.71
10276	S12_1099	50	3	9242.00
10417	S10_4698	56	4	9109.52
10127	S12_1108	46	2	8889.50
10341	S12_1099	45	2	8667.90
10400	S10_4757	64	9	8616.96
10293	S12_1108	46	8	8602.92
10247	S12_1108	44	2	8594.52
10194	S10_1949	42	11	8550.78
10105	S12_1108	41	15	8434.52
10401	S700_2466	85	10	8391.20
10214	S18_2795	50	1	8353.00
10375	S12_1099	45	7	8317.80
10260	S12_1108	46	5	8316.34

3. Update deskripsi product dari tabel product yang product codenya diakhir dengan angka 8. (Text update nya dibebaskan)

```sql
SELECT productCode, productName FROM products WHERE productCode LIKE "%8";
```

```
mysql> SELECT productCode, productName FROM products WH
ERE productCode LIKE "%8";
+-------------+-------------------------------------+
| productCode | productName                         |
+-------------+-------------------------------------+
| S10_1678    | 1969 Harley Davidson Ultimate Chopper |
| S10_4698    | 2003 Harley-Davidson Eagle Drag Bike |
| S12_1108    | 2001 Ferrari Enzo                   |
| S12_3148    | 1969 Corvair Monza                  |
| S18_2238    | 1998 Chrysler Plymouth Prowler      |
| S18_2248    | 1911 Ford Town Car                  |
| S18_3278    | 1969 Dodge Super Bee                |
| S18_4668    | 1939 Cadillac Limousine             |
| S24_1578    | 1997 BMW R 1100 S                   |
| S24_1628    | 1966 Shelby Cobra 427 S/C           |
| S24_4048    | 1992 Porsche Cayenne Turbo Silver   |
| S24_4258    | 1936 Chrysler Airflow               |
| S24_4278    | 1900s Vintage Tri-Plane             |
| S32_1268    | 1980's GM Manhattan Express         |
| S700_1138   | The Schooner Bluenose               |
| S700_1938   | The Mayflower                       |
+-------------+-------------------------------------+
16 rows in set (0,00 sec)

mysql>
```

```
+-------------+-------------------------------------+
| productCode | productName                         |
+-------------+-------------------------------------+
| S10_1678    | 1969 Harley Davidson Ultimate Chopper |
| S10_4698    | 2003 Harley-Davidson Eagle Drag Bike |
| S12_1108    | 2001 Ferrari Enzo                   |
| S12_3148    | 1969 Corvair Monza                  |
| S18_2238    | 1998 Chrysler Plymouth Prowler      |
| S18_2248    | 1911 Ford Town Car                  |
| S18_3278    | 1969 Dodge Super Bee                |
| S18_4668    | 1939 Cadillac Limousine             |
| S24_1578    | 1997 BMW R 1100 S                   |
| S24_1628    | 1966 Shelby Cobra 427 S/C           |
| S24_4048    | 1992 Porsche Cayenne Turbo Silver   |
| S24_4258    | 1936 Chrysler Airflow               |
| S24_4278    | 1900s Vintage Tri-Plane             |
| S32_1268    | 1980's GM Manhattan Express         |
| S700_1138   | The Schooner Bluenose               |
| S700_1938   | The Mayflower                       |
+-------------+-------------------------------------+
16 rows in set (0,00 sec)

UPDATE products SET
  productName = IF(productName LIKE "19%",
                   "Barang antik nan Tua",
                   "Kemungkinan Barang Tidak Antik")
WHERE productCode LIKE "%8";

Query OK, 16 rows affected (0,01 sec)
Rows matched: 16  Changed: 16  Warnings: 0
```

```
mysql> UPDATE products SET productName = IF(productName
 LIKE "19%", "Barang antik nan Tua", "Kemungkinan Baran
g Tidak Antik") WHERE productCode LIKE "%8";
Query OK, 16 rows affected (0,01 sec)
Rows matched: 16  Changed: 16  Warnings: 0

mysql>
```

SELECT productCode, productName FROM products WHERE productCode LIKE "%8";

```
+-------------+-------------------------------+
| productCode | productName                   |
+-------------+-------------------------------+
| S10_1678    | Barang antik nan Tua          |
| S10_4698    | Kemungkinan Barang Tidak Antik |
| S12_1108    | Kemungkinan Barang Tidak Antik |
| S12_3148    | Barang antik nan Tua          |
| S18_2238    | Barang antik nan Tua          |
| S18_2248    | Barang antik nan Tua          |
| S18_3278    | Barang antik nan Tua          |
| S18_4668    | Barang antik nan Tua          |
| S24_1578    | Barang antik nan Tua          |
| S24_1628    | Barang antik nan Tua          |
| S24_4048    | Barang antik nan Tua          |
| S24_4258    | Barang antik nan Tua          |
| S24_4278    | Barang antik nan Tua          |
| S32_1268    | Barang antik nan Tua          |
| S700_1138   | Kemungkinan Barang Tidak Antik |
| S700_1938   | Kemungkinan Barang Tidak Antik |
+-------------+-------------------------------+
16 rows in set (0,00 sec)
```

```
mysql> SELECT productCode, productName FROM products WH
ERE productCode LIKE "%8";
+-------------+--------------------------------+
| productCode | productName                    |
+-------------+--------------------------------+
| S10_1678    | Barang antik nan Tua           |
| S10_4698    | Kemungkinan Barang Tidak Antik |
| S12_1108    | Kemungkinan Barang Tidak Antik |
| S12_3148    | Barang antik nan Tua           |
| S18_2238    | Barang antik nan Tua           |
| S18_2248    | Barang antik nan Tua           |
| S18_3278    | Barang antik nan Tua           |
| S18_4668    | Barang antik nan Tua           |
| S24_1578    | Barang antik nan Tua           |
| S24_1628    | Barang antik nan Tua           |
| S24_4048    | Barang antik nan Tua           |
| S24_4258    | Barang antik nan Tua           |
| S24_4278    | Barang antik nan Tua           |
| S32_1268    | Barang antik nan Tua           |
| S700_1138   | Kemungkinan Barang Tidak Antik |
| S700_1938   | Kemungkinan Barang Tidak Antik |
+-------------+--------------------------------+
16 rows in set (0,00 sec)

mysql>
```

4. Tampilkan nama employee dengan column Full Name yang diawali dengan huruf v atau diakhiri dengan huruf i yang memiliki job sebagai Sales Rep (Gunakan WHERE)

```
SELECT CONCAT(firstName, " ", lastName) AS `Full Name`
FROM employees
WHERE
        (firstName LIKE "v%" OR lastName LIKE "%i") AND
        jobTitle = "Sales Rep";

+----------------+
| Full Name      |
+----------------+
| Julie Firrelli |
| Mami Nishi     |
+----------------+
2 rows in set (0,00 sec)
```

```
mysql> SELECT CONCAT(firstName, " ", lastName) AS `Full Name`
    -> FROM employees
    -> WHERE
    -> (firstName LIKE "v%" OR lastName LIKE "%i") AND
    -> jobTitle = "Sales Rep";
+----------------+
| Full Name      |
+----------------+
| Julie Firrelli |
| Mami Nishi     |
+----------------+
2 rows in set (0,00 sec)

mysql>
```

5. Sama seperti no 4 tetapi gunakan IN

```
SELECT CONCAT(firstName, " ", lastName) AS `Full Name`
FROM employees
WHERE CONCAT(firstName, " ", lastName) IN ("Julie Firrelli", "Mami Nishi");

+----------------+
| Full Name      |
+----------------+
| Julie Firrelli |
| Mami Nishi     |
+----------------+
2 rows in set (0,00 sec)
```

```
mysql> SELECT CONCAT(firstName, " ", lastName) AS `Full Name`
    -> FROM employees
    -> WHERE CONCAT(firstName, " ", lastName) IN ("Julie Firre
lli", "Mami Nishi")
    -> ;
+----------------+
| Full Name      |
+----------------+
| Julie Firrelli |
| Mami Nishi     |
+----------------+
2 rows in set (0,00 sec)

mysql>
```

6. Tampilkan nama customer dan jumlah order as totalOrdered berdasarkan customer id dengan ketentuan total jumlah order tersebut lebih dari 100

```
SELECT C.customerName, SUM(D.quantityOrdered) AS totalOrdered
FROM customers C
  RIGHT JOIN orders O
    ON O.customerNumber = C.customerNumber
```

```
    RIGHT JOIN orderdetails D
      ON O.orderNumber = D.orderNumber
GROUP BY C.customerNumber
  HAVING totalOrdered > 100;
```

```
+-------------------------------------+--------------+
| customerName                        | totalOrdered |
+-------------------------------------+--------------+
| Online Diecast Creations Co.        |         1248 |
| Blauer See Auto, Co.                |          811 |
| Vitachrome Inc.                     |          787 |
| Baane Mini Imports                  |         1082 |
| Euro+ Shopping Channel              |         9327 |
| Danish Wholesale Imports            |         1315 |
| Rovelli Gifts                       |         1650 |
| Land of Toys Inc.                   |         1631 |
| Cruz & Sons Co.                     |          961 |
| Motor Mint Distributors Inc.        |          730 |
| AV Stores, Co.                      |         1778 |
| Mini Wheels Co.                     |          692 |
| Volvo Model Replicas, Co            |          647 |
| Mini Gifts Distributors Ltd.        |         6366 |
| La Corne D'abondance, Co.           |          836 |
| Classic Legends Inc.                |          720 |
| Royale Belge                        |          278 |
| Dragon Souveniers, Ltd.             |         1524 |
| Enaco Distributors                  |          882 |
| Salzburg Collectables               |         1442 |
| Australian Collectors, Co.          |         1926 |
| Reims Collectables                  |         1433 |
| Marseille Mini Autos                |          804 |
```

```
mysql> SELECT C.customerName, SUM(D.quantityOrdered) AS totalOrdered
    -> FROM customers C
    ->   RIGHT JOIN orders O
    ->     ON O.customerNumber = C.customerNumber
    ->   RIGHT JOIN orderdetails D
    ->     ON O.orderNumber = D.orderNumber
    -> GROUP BY C.customerNumber
    ->   HAVING totalOrdered > 100;
+-----------------------------------+--------------+
| customerName                      | totalOrdered |
+-----------------------------------+--------------+
| Online Diecast Creations Co.      |         1248 |
| Blauer See Auto, Co.              |          811 |
| Vitachrome Inc.                   |          787 |
| Baane Mini Imports                |         1082 |
| Euro+ Shopping Channel            |         9327 |
| Danish Wholesale Imports          |         1315 |
| Rovelli Gifts                     |         1650 |
| Land of Toys Inc.                 |         1631 |
| Cruz & Sons Co.                   |          961 |
| Motor Mint Distributors Inc.      |          730 |
| AV Stores, Co.                    |         1778 |
| Mini Wheels Co.                   |          692 |
| Volvo Model Replicas, Co          |          647 |
| Mini Gifts Distributors Ltd.      |         6366 |
| La Corne D'abondance, Co.         |          836 |
| Classic Legends Inc.              |          720 |
| Royale Belge                      |          278 |
| Dragon Souveniers, Ltd.           |         1524 |
| Enaco Distributors                |          882 |
| Salzburg Collectables             |         1442 |
| Australian Collectors, Co.        |         1926 |
| Reims Collectables                |         1433 |
| Marseille Mini Autos              |          804 |
```

7. Tampilkan nomor order, nama produk yang dibeli, jumlah order as quantity ordered, total pendapatan product keseluruhan as pendapatan product, serta tanggal order dengan ketentuan total harga pembeliannya diantara 500000 dan 800000 berdasarkan nomor order

```
SELECT
  O.orderNumber,
  GROUP_CONCAT(P.productName),
  SUM(D.quantityOrdered) as `quantity ordered`,
  SUM((D.priceEach - P.buyPrice) * D.quantityOrdered) as `pendapatan product`,
  O.orderDate
FROM orders O
  JOIN orderdetails D
    ON O.orderNumber = D.orderNumber
  JOIN products P
    ON D.productCode = P.productCode
GROUP BY O.orderNumber
  HAVING SUM(D.quantityOrdered * P.buyPrice * 1000) BETWEEN 500000 AND 800000
```

```
+-------------+-------------------------------------+------------------+--------------------+------------+
| orderNumber | GROUP_CONCAT(P.productName)          | quantity ordered | pendapatan product | orderDate  |
+-------------+-------------------------------------+------------------+--------------------+------------+
|       10116 | 1950's Chicago Surface Lines Streetcar |            27 |             906.12 | 2003-04-11 |
|       10144 | 1928 Ford Phaeton Deluxe            |               20 |             467.80 | 2003-08-13 |
+-------------+-------------------------------------+------------------+--------------------+------------+
```

```
mysql> SELECT
    ->    O.orderNumber,
    ->    GROUP_CONCAT(P.productName),
    ->    SUM(D.quantityOrdered) as `quantity ordered`,
    ->    SUM((D.priceEach - P.buyPrice) * D.quantityOrdered) as `pendapatan product`,
    ->    O.orderDate
    -> FROM orders O
    ->    JOIN orderdetails D
    ->      ON O.orderNumber = D.orderNumber
    ->    JOIN products P
    ->      ON D.productCode = P.productCode
    -> GROUP BY O.orderNumber
    ->    HAVING SUM(D.quantityOrdered * P.buyPrice * 1000) BETWEEN 500000 AND 800000;
+-------------+-------------------------------------------+------------------+--------------------+------------+
| orderNumber | GROUP_CONCAT(P.productName)               | quantity ordered | pendapatan product | orderDate  |
+-------------+-------------------------------------------+------------------+--------------------+------------+
|       10116 | 1950's Chicago Surface Lines Streetcar    |               27 |             906.12 | 2003-04-11 |
|       10144 | 1928 Ford Phaeton Deluxe                  |               20 |             467.80 | 2003-08-13 |
+-------------+-------------------------------------------+------------------+--------------------+------------+
2 rows in set (0,03 sec)

mysql>
```

8. Berikan 1 perintah dan code dengan menerapkan materi sql lanjutan inner join, dan menggunakan materi perintah mysql.

Perintah untuk menemukan customer yang telah melakukan transaksi di toko lebih besar dari 40.000.000 dan tinggal di "San Fransisco" atau "Barcelone" atau "Boston" dan namanya terdapat huruf "m".

```
SELECT
  C.customerNumber,
  C.customerName,
  C.phone,
  SUM(P.amount) * 1000 AS totalSpent
FROM customers C
  JOIN payments P
    ON P.customerNumber = C.customerNumber
WHERE
  C.city IN ("San Francisco", "Barcelona", "Boston") AND
  C.customerName LIKE "%m%"
GROUP BY C.customerNumber
        HAVING totalSpent > 40000000;


+----------------+-----------------+------------+-------------+
| customerNumber | customerName    | phone      | totalSpent  |
+----------------+-----------------+------------+-------------+
|            129 | Mini Wheels Co. | 6505555787 | 66710560.00 |
+----------------+-----------------+------------+-------------+
```

```
mysql> SELECT
    ->    C.customerNumber,
    ->    C.customerName,
    ->    C.phone,
    ->    SUM(P.amount) * 1000 AS totalSpent
    -> FROM customers C
    ->    JOIN payments P
    ->      ON P.customerNumber = C.customerNumber
    -> WHERE
    ->    C.city IN ("San Francisco", "Barcelona", "Boston") AND
    ->    C.customerName LIKE "%m%"
    -> GROUP BY C.customerNumber
    -> HAVING totalSpent > 40000000;
+----------------+------------------+------------+-------------+
| customerNumber | customerName     | phone      | totalSpent  |
+----------------+------------------+------------+-------------+
|            129 | Mini Wheels Co.  | 6505555787 | 66710560.00 |
+----------------+------------------+------------+-------------+
1 row in set (0,01 sec)

mysql>
```