TASK-6 (MYSQL)

```
mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| classicmodels      |
| customer_orders    |
| customers_orders   |
| information_schema |
| myfolder           |
| mysql              |
| new database       |
| office             |
| performance_schema |
| sakila             |
| school             |
| school folder      |
| sys                |
| world              |
+--------------------+
14 rows in set (0.02 sec)
```

```
mysql> use classicmodels;
Database changed
mysql> show tables;
+-------------------------+
| Tables_in_classicmodels |
+-------------------------+
| customers               |
| deep                    |
| employees               |
| facility                |
| offices                 |
| orderdetails            |
| orders                  |
| payments                |
| productlines            |
| products                |
| project                 |
+-------------------------+
11 rows in set (0.00 sec)
```

1-Use EXTRACT(MONTH FROM order_date) for month.

```
mysql> SELECT EXTRACT(MONTH FROM orderDate) AS order_month FROM orders LIMIT 10;
ERROR 1327 (42000): Undeclared variable: 10
mysql> SELECT EXTRACT(MONTH FROM orderDate) AS order_month FROM orders LIMIT 10;
+-------------+
| order_month |
+-------------+
|           1 |
|           1 |
|           1 |
|           1 |
|           1 |
|           2 |
|           2 |
|           2 |
|           3 |
|           3 |
+-------------+
10 rows in set (0.00 sec)

mysql>
```

2-GROUP BY year/month.

```
mysql> SELECT    YEAR(orderDate) AS year,    MONTH(orderDate) AS month,    COUNT(*) AS count FROM orders GROUP BY    YEAR(orderDate), MONTH(orderDate) LIMIT 10;
+------+-------+-------+
| year | month | count |
+------+-------+-------+
| 2003 |     1 |     5 |
| 2003 |     2 |     3 |
| 2003 |     3 |     6 |
| 2003 |     4 |     7 |
| 2003 |     5 |     6 |
| 2003 |     6 |     7 |
| 2003 |     7 |     7 |
| 2003 |     8 |     5 |
| 2003 |     9 |     8 |
| 2003 |    10 |    18 |
+------+-------+-------+
10 rows in set (0.00 sec)

mysql>
```

```
mysql> select month(orderDate) as months
    -> FROM orders
    -> GROUP BY month(orderDate);
+--------+
| months |
+--------+
|      1 |
|      2 |
|      3 |
|      4 |
|      5 |
|      6 |
|      7 |
|      8 |
|      9 |
|     10 |
|     11 |
|     12 |
+--------+
12 rows in set (0.00 sec)
```

3-Use SUM() for revenue.

```
mysql> SELECT * FROM PAYMENTS LIMIT 10;
+----------------+-------------+-------------+----------+
| customerNumber | checkNumber | paymentDate | amount   |
+----------------+-------------+-------------+----------+
|            103 | HQ336336    | 2004-10-19  |  6066.78 |
|            103 | JM555205    | 2003-06-05  | 14571.44 |
|            103 | OM314933    | 2004-12-18  |  1676.14 |
|            112 | BO864823    | 2004-12-17  | 14191.12 |
|            112 | HQ55022     | 2003-06-06  | 32641.98 |
|            112 | ND748579    | 2004-08-20  | 33347.88 |
|            114 | GG31455     | 2003-05-20  | 45864.03 |
|            114 | MA765515    | 2004-12-15  | 82261.22 |
|            114 | NP603840    | 2003-05-31  |  7565.08 |
|            114 | NR27552     | 2004-03-10  | 44894.74 |
+----------------+-------------+-------------+----------+
10 rows in set (0.00 sec)

mysql> SELECT SUM(amount) FROM PAYMENTS;
+-------------+
| SUM(amount) |
+-------------+
|  8853839.23 |
+-------------+
1 row in set (0.00 sec)
```

4-COUNT(DISTINCT order_id) for volume

```
mysql> select count(distinct orderNumber) AS order_id
    -> from orders
    -> limit 15;
+----------+
| order_id |
+----------+
|      326 |
+----------+
1 row in set (0.01 sec)
```

5-Use ORDER BY for sorting

```
mysql> select customerNumber
    -> from orders
    -> ORDER BY customerNumber ASC
    -> limit 10;
+----------------+
| customerNumber |
+----------------+
|            103 |
|            103 |
|            103 |
|            112 |
|            112 |
|            112 |
|            114 |
|            114 |
|            114 |
|            114 |
+----------------+
10 rows in set (0.00 sec)
```

6-Limit results for specific time periods

```
mysql> select * from orders limit 10;
+-------------+------------+--------------+-------------+----------+-----------------------------------------------------------------+----------------+
| orderNumber | orderDate  | requiredDate | shippedDate | status   | comments                                                        | customerNumber |
+-------------+------------+--------------+-------------+----------+-----------------------------------------------------------------+----------------+
|       10100 | 2003-01-06 | 2003-01-13   | 2003-01-10  | Shipped  | NULL                                                            |            363 |
|       10101 | 2003-01-09 | 2003-01-18   | 2003-01-11  | Shipped  | Check on availability.                                          |            128 |
|       10102 | 2003-01-10 | 2003-01-18   | 2003-01-14  | Shipped  | NULL                                                            |            181 |
|       10103 | 2003-01-29 | 2003-02-07   | 2003-02-02  | Shipped  | NULL                                                            |            121 |
|       10104 | 2003-01-31 | 2003-02-09   | 2003-02-01  | Shipped  | NULL                                                            |            141 |
|       10105 | 2003-02-11 | 2003-02-21   | 2003-02-12  | Shipped  | NULL                                                            |            145 |
|       10106 | 2003-02-17 | 2003-02-24   | 2003-02-21  | Shipped  | NULL                                                            |            278 |
|       10107 | 2003-02-24 | 2003-03-03   | 2003-02-26  | Shipped  | Difficult to negotiate with customer. We need more marketing materials |     131 |
|       10108 | 2003-03-03 | 2003-03-12   | 2003-03-08  | Shipped  | NULL                                                            |            385 |
|       10109 | 2003-03-10 | 2003-03-19   | 2003-03-11  | Shipped  | Customer requested that FedEx Ground is used for this shipping  |            486 |
+-------------+------------+--------------+-------------+----------+-----------------------------------------------------------------+----------------+
10 rows in set (0.05 sec)
```