Name : Gayathri Devi
Id : 11954
Day 4 : 4.10.2023

Enter password: ****
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 24
Server version: 8.0.33 MySQL Community Server - GPL

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Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> show databases;
```
+--------------------+
| Database           |
+--------------------+
| assignments        |
| day1_mysqldatabase |
| gayathrikuppusamy  |
| information_schema |
| mysql              |
| performance_schema |
| sakila             |
| sys                |
| world              |
+--------------------+
```
9 rows in set (0.01 sec)

mysql> use day1_mysqldatabse;
ERROR 1049 (42000): Unknown database 'day1_mysqldatabse'
mysql> use day1_mysqldataba1se;
ERROR 1049 (42000): Unknown database 'day1_mysqldataba1se'

mysql> use day1_mysqldatabase;
Database changed

mysql> show tables;
```
+-----------------------------+
| Tables_in_day1_mysqldatabase |
+-----------------------------+
| tbl_dept             |
| tbl_employee           |
| tbl_student           |
+-----------------------------+
3 rows in set (0.01 sec)
```

mysql> select * from tbl_employee;
Empty set (0.01 sec)

mysql> select * from tbl_student;
```
+------+--------+-----------+
| srno | sname  | smarks   |
+------+--------+-----------+
|    1 | Sakthi |       100 |
|    2 | vel    |      1000 |
|    3 | Sakthi | 100000000 |
|   98 | vel    |      1000 |
|   99 | Sakthi |         0 |
+------+--------+-----------+
5 rows in set (0.00 sec)
```

mysql> select * from tbl_employee;
Empty set (0.00 sec)

mysql> desc tbl_employee;
```
+-------+-------------+------+-----+---------+-------+
| Field | Type        | Null | Key | Default | Extra |
+-------+-------------+------+-----+---------+-------+
| eid   | int         | NO   | PRI | NULL    |       |
| ename | varchar(20) | YES  |     | NULL    |       |
| esal  | int         | YES  |     | NULL    |       |
| dno   | int         | YES  | MUL | NULL    |       |
+-------+-------------+------+-----+---------+-------+
4 rows in set (0.01 sec)
```

```
mysql> insert into tbl_employee values(101,"Gayathri",1000,10);
ERROR 1452 (23000): Cannot add or update a child row: a foreign key constraint fails
(`day1_mysqldatabase`.`tbl_employee`, CONSTRAINT `tbl_employee_ibfk_1` FOREIGN KEY
(`dno`) REFERENCES `tbl_dept` (`dno`))

mysql> select * from tbl_dept;
Empty set (0.00 sec)

mysql> insert into tbl_dept values(10,"LD");
Query OK, 1 row affected (0.00 sec)

mysql> insert into tbl_dept values(20,"Project");
Query OK, 1 row affected (0.01 sec)

mysql> insert into tbl_employee values(101,"Gayathri",1000,10);
Query OK, 1 row affected (0.00 sec)

mysql> insert into tbl_employee values(102,"Devi",1000,20);
Query OK, 1 row affected (0.00 sec)

mysql> select * from tbl_dept;
+-----+---------+
| dno | dname   |
+-----+---------+
|  10 | LD      |
|  20 | Project |
+-----+---------+
2 rows in set (0.00 sec)

mysql> select * from tbl_employee;
+-----+----------+------+------+
| eid | ename    | esal | dno  |
+-----+----------+------+------+
| 101 | Gayathri | 1000 |   10 |
| 102 | Devi     | 1000 |   20 |
+-----+----------+------+------+
2 rows in set (0.00 sec)

mysql> commit;
Query OK, 0 rows affected (0.00 sec)
```

mysql> create table tbl_employee1 as select * from tbl_employee;
Query OK, 2 rows affected (0.04 sec)
Records: 2 Duplicates: 0 Warnings: 0

mysql> select * from tbl_employee1;
```
+-----+----------+------+------+
| eid | ename    | esal | dno  |
+-----+----------+------+------+
| 101 | Gayathri | 1000 |   10 |
| 102 | Devi     | 1000 |   20 |
+-----+----------+------+------+
```
2 rows in set (0.00 sec)

mysql> desc tbl_employee1;
```
+-------+-------------+------+-----+---------+-------+
| Field | Type        | Null | Key | Default | Extra |
+-------+-------------+------+-----+---------+-------+
| eid   | int         | NO   |     | NULL    |       |
| ename | varchar(20) | YES  |     | NULL    |       |
| esal  | int         | YES  |     | NULL    |       |
| dno   | int         | YES  |     | NULL    |       |
+-------+-------------+------+-----+---------+-------+
```
4 rows in set (0.00 sec)

mysql> create table tbl_employee2 as select * from tbl_employee where 1=2;
Query OK, 0 rows affected (0.02 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> desc tbl_employee2;
```
+-------+-------------+------+-----+---------+-------+
| Field | Type        | Null | Key | Default | Extra |
+-------+-------------+------+-----+---------+-------+
| eid   | int         | NO   |     | NULL    |       |
| ename | varchar(20) | YES  |     | NULL    |       |
| esal  | int         | YES  |     | NULL    |       |
| dno   | int         | YES  |     | NULL    |       |
+-------+-------------+------+-----+---------+-------+
```
4 rows in set (0.00 sec)

mysql> select * from tbl_employee2;
Empty set (0.00 sec)

mysql> desc tbl_employee1;

+-------+-------------+------+-----+---------+-------+
| Field | Type | Null | Key | Default | Extra |
+-------+-------------+------+-----+---------+-------+
eid	int	NO		NULL	
ename	varchar(20)	YES		NULL	
esal	int	YES		NULL	
dno	int	YES		NULL	
+-------+-------------+------+-----+---------+-------+
4 rows in set (0.00 sec)

mysql> select * from tbl_employee1;

+-----+----------+------+------+
| eid | ename | esal | dno |
+-----+----------+------+------+
| 101 | Gayathri | 1000 | 10 |
| 102 | Devi | 1000 | 20 |
+-----+----------+------+------+
2 rows in set (0.00 sec)

mysql> insert into tbl_employee1 values(103,"Naveen",2000,20);
Query OK, 1 row affected (0.00 sec)

mysql> insert into tbl_employee1 values(104,"Pravin",3000,20);
Query OK, 1 row affected (0.00 sec)

mysql> insert into tbl_employee1 values(105,"Muthu",4000,10);
Query OK, 1 row affected (0.00 sec)

mysql> commit;
Query OK, 0 rows affected (0.00 sec)

mysql> select * from tbl_employee1;

+-----+----------+------+------+
| eid | ename | esal | dno |
+-----+----------+------+------+
| 101 | Gayathri | 1000 | 10 |

```
| 102 | Devi    | 1000 |  20 |
| 103 | Naveen  | 2000 |  20 |
| 104 | Pravin  | 3000 |  20 |
| 105 | Muthu   | 4000 |  10 |
+-----+----------+------+------+
5 rows in set (0.00 sec)
```

mysql> select count(*) from tbl_employee1;
```
+----------+
| count(*) |
+----------+
|        5 |
+----------+
1 row in set (0.01 sec)
```

mysql> select dno, count(*) from tbl_employee1 group by dno;
```
+------+----------+
| dno  | count(*) |
+------+----------+
|   10 |        2 |
|   20 |        3 |
+------+----------+
2 rows in set (0.00 sec)
```

mysql> select dno as "Department Number", count(*) as "Number of Employees" from tbl_employee1 group by dno;
```
+-------------------+---------------------+
| Department Number | Number of Employees |
+-------------------+---------------------+
|                10 |                   2 |
|                20 |                   3 |
+-------------------+---------------------+
2 rows in set (0.00 sec)
```

mysql> select dno as "Department Number", count(*) as "Number of Employees" from tbl_employee1 group by dno order by desc;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'desc' at line 1

mysql> select dno as "Department Number", count(*) as "Number of Employees" from tbl_employee1 group by dno;
```
+------------------+---------------------+
| Department Number | Number of Employees |
+------------------+---------------------+
|               10 |                   2 |
|               20 |                   3 |
+------------------+---------------------+
2 rows in set (0.00 sec)
```

mysql> select dno as "Department Number", count(*) as "Number of Employees" from tbl_employee1 group by dno
    -> order by desc;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'desc' at line 2
mysql> select dno as "Department Number", count(*) as "Number of Employees" from tbl_employee1 group by dno desc;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'desc' at line 1
mysql> select dno as "Department Number", count(*) as "Number of Employees" from tbl_employee1 group by dno
    -> order by dno ascn;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'ascn' at line 2

mysql> select dno as "Department Number", count(*) as "Number of Employees" from tbl_employee1 group by dno order by dno desc;
```
+------------------+---------------------+
| Department Number | Number of Employees |
+------------------+---------------------+
|               20 |                   3 |
|               10 |                   2 |
+------------------+---------------------+
2 rows in set (0.00 sec)
```

mysql> select sum(*) from tbl_employee1;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '*) from tbl_employee1' at line 1

mysql> select sum(esal) from tbl_employee1;

```
+-----------+
| sum(esal) |
+-----------+
|     11000 |
+-----------+
```
1 row in set (0.01 sec)

mysql> select sum(esal) from tbl_employee1 group by esal;

```
+-----------+
| sum(esal) |
+-----------+
|      2000 |
|      2000 |
|      3000 |
|      4000 |
+-----------+
```
4 rows in set (0.00 sec)

mysql> select esal as "Salary Type", count(esal) as "Salary count",sum(esal) as " Sum of salary" from tbl_employee1 group by esal;

```
+-------------+--------------+---------------+
| Salary Type | Salary count | Sum of salary |
+-------------+--------------+---------------+
|        1000 |            2 |          2000 |
|        2000 |            1 |          2000 |
|        3000 |            1 |          3000 |
|        4000 |            1 |          4000 |
+-------------+--------------+---------------+
```
4 rows in set, 1 warning (0.00 sec)

mysql> select esal as "Salary Type", count(esal) as "Salary count",sum(esal) as " Sum of salary" from tbl_employee1 group by dno;
ERROR 1055 (42000): Expression #1 of SELECT list is not in GROUP BY clause and contains nonaggregated column 'day1_mysqldatabase.tbl_employee1.esal' which is not functionally dependent on columns in GROUP BY clause; this is incompatible with sql_mode=only_full_group_by
mysql> select esal as "Salary Type", count(esal) as "Salary count",sum(esal) as " Sum of salary" from tbl_employee1
    -> group by dno;

ERROR 1055 (42000): Expression #1 of SELECT list is not in GROUP BY clause and contains nonaggregated column 'day1_mysqldatabase.tbl_employee1.esal' which is not functionally dependent on columns in GROUP BY clause; this is incompatible with sql_mode=only_full_group_by

mysql> select sum(dno) from tbl_employee1;

```
+----------+
| sum(dno) |
+----------+
|       80 |
+----------+
```
1 row in set (0.00 sec)

mysql> select avg(esal) from tbl_employee1;

```
+-----------+
| avg(esal) |
+-----------+
| 2200.0000 |
+-----------+
```
1 row in set (0.00 sec)

mysql> select avg(esal) from tbl_employee1 group by dno;

```
+-----------+
| avg(esal) |
+-----------+
| 2500.0000 |
| 2000.0000 |
+-----------+
```
2 rows in set (0.00 sec)

mysql> select dno, avg(esal) from tbl_employee1 group by dno;

```
+------+-----------+
| dno  | avg(esal) |
+------+-----------+
|   10 | 2500.0000 |
|   20 | 2000.0000 |
+------+-----------+
```
2 rows in set (0.00 sec)

mysql> select avg(dno) from tbl_employee1;

```
+----------+
| avg(dno) |
+----------+
|  16.0000 |
+----------+
1 row in set (0.00 sec)
```

mysql> select count(dno) from tbl_employee1;

```
+------------+
| count(dno) |
+------------+
|          5 |
+------------+
1 row in set (0.00 sec)
```

mysql> select sum(dno) from tbl_employee1;

```
+----------+
| sum(dno) |
+----------+
|       80 |
+----------+
1 row in set (0.00 sec)
```

mysql> select min(esal) from tbl_employee1;

```
+-----------+
| min(esal) |
+-----------+
|      1000 |
+-----------+
1 row in set (0.01 sec)
```

mysql> select min(dno) from tbl_employee1;

```
+----------+
| min(dno) |
+----------+
|       10 |
+----------+
1 row in set (0.00 sec)
```

mysql> select min(eid) from tbl_employee1;

```
+----------+
| min(eid) |
+----------+
|      101 |
+----------+
1 row in set (0.00 sec)
```

mysql> select min(ename) from tbl_employee1;

```
+------------+
| min(ename) |
+------------+
| Devi       |
+------------+
1 row in set (0.00 sec)
```

mysql> select count(ename) from tbl_employee1;

```
+--------------+
| count(ename) |
+--------------+
|            5 |
+--------------+
1 row in set (0.00 sec)
```

mysql> select sum(ename) from tbl_employee1;

```
+------------+
| sum(ename) |
+------------+
|          0 |
+------------+
1 row in set, 5 warnings (0.00 sec)
```

mysql> select avg(ename) from tbl_employee1;

```
+------------+
| avg(ename) |
+------------+
|          0 |
+------------+
1 row in set, 5 warnings (0.00 sec)
```

mysql> select max(esal) as "Maximum of Salary" from tbl_employee1;

```
+------------------+
| Maximum of Salary |
+------------------+
|             4000 |
+------------------+
1 row in set (0.00 sec)
```

mysql> select count(dno) as "No.of.department" , min(esal) as "Minimum Salary", max(esal) as "Maximum Salary" from tbl_employee1 gropu by dno;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'by dno' at line 1

mysql> select count(dno) as "No.of.department" , min(esal) as "Minimum Salary", max(esal) as "Maximum Salary" from tbl_employee1 group by dno;
```
+------------------+----------------+----------------+
| No.of.department | Minimum Salary | Maximum Salary |
+------------------+----------------+----------------+
|                2 |           1000 |           4000 |
|                3 |           1000 |           3000 |
+------------------+----------------+----------------+
2 rows in set (0.00 sec)
```

mysql> select dno as "Department Number",count(dno) as "No.of.department" , min(esal) as "Minimum Salary", max(esal) as "Maximum Salary" from tbl_employee1 group by dno;
```
+-------------------+------------------+----------------+----------------+
| Department Number | No.of.department | Minimum Salary | Maximum Salary |
+-------------------+------------------+----------------+----------------+
|                10 |                2 |           1000 |           4000 |
|                20 |                3 |           1000 |           3000 |
+-------------------+------------------+----------------+----------------+
2 rows in set (0.00 sec)
```

mysql> select dno as "Department Number",count(dno) as "No.of.department" , min(esal) as "Minimum Salary", max(esal) as "Maximum Salary", sum(esal) as"Sum", avg(esal) as "Average Salary" from tbl_employee1 group by dno;
```
+-------------------+------------------+----------------+----------------+------+----------------+
| Department Number | No.of.department | Minimum Salary | Maximum Salary | Sum  | Average Salary |
+-------------------+------------------+----------------+----------------+------+----------------+
```

```
|                10 |                2 |           1000 |           4000 | 5000 |     2500.0000 |
|                20 |                3 |           1000 |           3000 | 6000 |     2000.0000 |
+-------------------+------------------+----------------+----------------+------+---------------+
2 rows in set (0.00 sec)

mysql>
```