

TASK - 1

1) Create a database with name entry.

```
mysql>
mysql> create database Entri;
Query OK, 1 row affected (0.01 sec)

mysql>
mysql>
mysql> use Entri;
Database changed
mysql>
```

2) Create a table student with columns id primary key auto increment, first_name not null, last_name.

```
mysql>
mysql> create table Student
-> (Id int primary key auto_increment,
-> First_name varchar(20) not null,
-> Last_name varchar(20));
Query OK, 0 rows affected (0.02 sec)

mysql>
mysql>
mysql> describe Student;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+-----+
| Id         | int           | NO   | PRI | NULL    | auto_increment |
| First_name | varchar(20)   | NO   |     | NULL    |                |
| Last_name  | varchar(20)   | YES  |     | NULL    |                |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

3) Alter table and add column age and dept.

```
mysql>
mysql> alter table Student
    -> add ( Department varchar(10) not null,
    -> Age tinyint not null);
Query OK, 0 rows affected (0.02 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> describe Student;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+-----+
| Id         | int           | NO   | PRI | NULL    | auto_increment |
| First_name | varchar(20)   | NO   |     | NULL    |                 |
| Last_name  | varchar(20)   | YES  |     | NULL    |                 |
| Department | varchar(10)   | NO   |     | NULL    |                 |
| Age        | tinyint       | NO   |     | NULL    |                 |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql>
```

- 4) Insert values (Maria, Gloria, CS, 22), (John, Smith, IT, 23),
 (Gal, Rao, CS, 22), (Jakey, Smith, EC, 24),
 (Rama, Saho, IT, 22), (Maria, Gaga, EC, 23).

```
mysql>
mysql>
mysql> insert into Student (First_name, Last_name, Department, Age)
    -> values('Maria', 'Gloria', 'CS', 22);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Student (First_name, Last_name, Department, Age)
    -> values('Jhon', 'Smith', 'IT', 23);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Student (First_name, Last_name, Department, Age)
    -> values('Gal', 'Rao', 'CS', 22);
Query OK, 1 row affected (0.00 sec)

mysql> insert into Student (First_name, Last_name, Department, Age)
    -> values('Jakey', 'Smith', 'EC', 24);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Student (First_name, Last_name, Department, Age)
    -> values('Rama', 'Saho', 'IT', 22);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Student (First_name, Last_name, Department, Age)
    -> values('Maria', 'Gaga', 'EC', 23);
Query OK, 1 row affected (0.01 sec)
```

5) Select all items in student table

```
mysql>
mysql> select *
      -> from Student;
+----+-----+-----+-----+-----+
| Id | First_name | Last_name | Department | Age |
+----+-----+-----+-----+-----+
| 1  | Maria      | Gloria    | CS          | 22  |
| 2  | Jhon       | Smith     | IT          | 23  |
| 3  | Gal        | Rao       | CS          | 22  |
| 4  | Jakey      | Smith     | EC          | 24  |
| 5  | Rama       | Saho      | IT          | 22  |
| 6  | Maria      | Gaga      | EC          | 23  |
+----+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

6) Select student names if last name = 'Smith'.

```
mysql>
mysql>
mysql> select First_name, Last_name
      -> from Student
      -> where Last_name='Smith';
+-----+-----+
| First_name | Last_name |
+-----+-----+
| Jhon       | Smith     |
| Jakey      | Smith     |
+-----+-----+
2 rows in set (0.00 sec)
```

7) Order students with their department desc and age asc

```
mysql>
mysql> select *
      -> from Student
      -> order by Department desc, Age asc;
+----+-----+-----+-----+-----+
| Id | First_name | Last_name | Department | Age |
+----+-----+-----+-----+-----+
| 5  | Rama       | Saho      | IT          | 22  |
| 2  | Jhon       | Smith     | IT          | 23  |
| 6  | Maria      | Gaga      | EC          | 23  |
| 4  | Jakey      | Smith     | EC          | 24  |
| 1  | Maria      | Gloria    | CS          | 22  |
| 3  | Gal        | Rao       | CS          | 22  |
+----+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

- 8) Select students with age is greater than or equal to 23 and department EC

```
mysql>
mysql> select *
      -> from Student
      -> where Age>='23' and Department='EC';
+----+-----+-----+-----+-----+
| Id | First_name | Last_name | Department | Age |
+----+-----+-----+-----+-----+
|  4 | Jakey      | Smith    | EC         | 24 |
|  6 | Maria      | Gaga     | EC         | 23 |
+----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql>
```

- 9) Select students where department CS or IT

```
mysql>
mysql> select *
      -> from Student
      -> where Department='CS' or Department='IT';
+----+-----+-----+-----+-----+
| Id | First_name | Last_name | Department | Age |
+----+-----+-----+-----+-----+
|  1 | Maria      | Gloria   | CS         | 22 |
|  2 | Jhon       | Smith    | IT         | 23 |
|  3 | Gal        | Rao      | CS         | 22 |
|  5 | Rama       | Saho     | IT         | 22 |
+----+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```