

## 1. Create a database with name entry

```
mysql> CREATE DATABASE IF NOT EXISTS entry;
Query OK, 1 row affected (0.02 sec)

mysql> show databases;
+-----+
| Database |
+-----+
| anu      |
| entri    |
| entry    |
| information_schema |
| mysql    |
| performance_schema |
| sample   |
| sys      |
+-----+
8 rows in set (0.00 sec)
```

## 2. Create a table student with columns id primary key auto increment, first\_name not null, last\_name;

```
mysql> use entry;
Database changed
mysql> CREATE TABLE student (
  -> id INT PRIMARY KEY AUTO_INCREMENT,
  -> first_name VARCHAR(255) NOT NULL,
  -> last_name VARCHAR(255)
  -> );
Query OK, 0 rows affected (0.04 sec)

mysql> describe student;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+-----+
| id         | int           | NO   | PRI | NULL    | auto_increment |
| first_name | varchar(255)  | NO   |     | NULL    |                |
| last_name  | varchar(255)  | YES  |     | NULL    |                |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

## 3. Alter table and add column age and department

```
mysql> alter table student
-> add (Age int not null,department varchar(15) not null);
Query OK, 0 rows affected (0.01 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(255)	NO		NULL	
last_name	varchar(255)	YES		NULL	
Age	int	NO		NULL	
department	varchar(15)	NO		NULL	

```
5 rows in set (0.00 sec)
```

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> INSERT INTO student (first_name,Last_name,Department,Age)
-> 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);
Query OK, 6 rows affected (0.01 sec)
Records: 6 Duplicates: 0 Warnings: 0
```

5.Select all items in student table

```
mysql> SELECT * FROM student;
```

id	first_name	last_name	Age	department
1	Maria	Gloria	22	CS
2	John	Smith	23	IT
3	Gal	Rao	22	CS
4	jakey	Smith	24	EC
5	Rama	Saho	22	IT
6	Maria	Gaga	23	EC

```
6 rows in set (0.000 sec)
```

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

```
mysql> SELECT first_name, last_name
-> FROM student
-> WHERE last_name= 'smith';
```

first_name	last_name
John	Smith
jakey	Smith

2 rows in set (0.00 sec)

7. Order students with their department DESC and age ASC

```
mysql> SELECT *
-> FROM student
-> ORDER BY department DESC, age ASC;
```

id	first_name	last_name	Age	department
5	Rama	Saho	22	IT
2	John	Smith	23	IT
6	Maria	Gaga	23	EC
4	jakey	Smith	24	EC
1	Maria	Gloria	22	CS
3	Gal	Rao	22	CS

6 rows in set (0.00 sec)

8. Select students with age is grater than or equal to 23 and department EC

```
mysql> SELECT *
-> FROM student WHERE Age >=23 AND department= 'EC';
```

id	first_name	last_name	Age	department
4	jakey	Smith	24	EC
6	Maria	Gaga	23	EC

```
2 rows in set (0.00 sec)
```

9. Select students where department CS or IT

```
mysql> SELECT * FROM student WHERE department='CS'OR department='IT';
```

id	first_name	last_name	Age	department
1	Maria	Gloria	22	CS
2	John	Smith	23	IT
3	Gal	Rao	22	CS
5	Rama	Saho	22	IT

```
4 rows in set (0.00 sec)
```