Practical-2 PART-B

```
mysql> create database stu;
Query OK, 1 row affected (0.00 sec)

mysql> use stu;
Database changed
mysql> CREATE TABLE students (student_id INT NOT NULL AUTO_INCREMENT PRIMARY KEY,
first_name VARCHAR(50) NOT NULL, last_name VARCHAR(50), email VARCHAR(100) UNIQUE, age INT
CHECK (age >= 17), dept_id INT) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
Query OK, 0 rows affected (0.04 sec)

mysql> CREATE TABLE departments (dept_id INT NOT NULL AUTO_INCREMENT PRIMARY KEY,
dept_name VARCHAR(100) NOT NULL UNIQUE) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
Query OK, 0 rows affected (0.03 sec)

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

mysql> select *from deparments;
ERROR 1146 (42S02): Table 'stu.deparments' doesn't exist
mysql> select *from departments;
Empty set (0.00 sec)

mysql> INSERT INTO departments (dept_name) VALUES ('Computer Science'), ('Mechanical'),
('Electrical');
Query OK, 3 rows affected (0.01 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql> select *from departments;
+---------+------------------+
| dept_id | dept_name        |
+---------+------------------+
|       1 | Computer Science |
|       3 | Electrical       |
|       2 | Mechanical       |
+---------+------------------+
3 rows in set (0.00 sec)

mysql> INSERT INTO students (first_name, last_name, email, age, dept_id) VALUES ('Aniket',
'Kamble', 'aniket@gmail.com', 20, 1), ('Sneha', 'Sharma', 'sneha@gmail.com', 19, 2), ('Amit', 'Kumar',
'amit@gmail.com', 21, 1), ('Priya', 'Desai', 'priya@gmail.com', 18, 3);
Query OK, 4 rows affected (0.01 sec)
Records: 4  Duplicates: 0  Warnings: 0

mysql> select *from students;
+------------+------------+-----------+------------------+------+---------+
| student_id | first_name | last_name | email            | age  | dept_id |
```

```
+------------+------------+-----------+------------------+------+---------+
|          1 | Aniket     | Kamble    | aniket@gmail.com |   20 |       1 |
|          2 | Sneha      | Sharma    | sneha@gmail.com  |   19 |       2 |
|          3 | Amit       | Kumar     | amit@gmail.com   |   21 |       1 |
|          4 | Priya      | Desai     | priya@gmail.com  |   18 |       3 |
+------------+------------+-----------+------------------+------+---------+
4 rows in set (0.00 sec)
```

mysql> SELECT s.first_name, s.last_name, d.dept_name FROM students s JOIN departments d ON s.dept_id = d.dept_id;
```
+------------+-----------+------------------+
| first_name | last_name | dept_name        |
+------------+-----------+------------------+
| Aniket     | Kamble    | Computer Science |
| Sneha      | Sharma    | Mechanical       |
| Amit       | Kumar     | Computer Science |
| Priya      | Desai     | Electrical       |
+------------+-----------+------------------+
4 rows in set (0.00 sec)
```

mysql> SELECT first_name, age FROM students WHERE age > 19;
```
+------------+------+
| first_name | age  |
+------------+------+
| Aniket     |   20 |
| Amit       |   21 |
+------------+------+
2 rows in set (0.00 sec)
```

mysql> SELECT d.dept_name, COUNT(*) AS total_students FROM students s JOIN departments d ON s.dept_id = d.dept_id GROUP BY d.dept_name;
```
+------------------+----------------+
| dept_name        | total_students |
+------------------+----------------+
| Computer Science |              2 |
| Electrical       |              1 |
| Mechanical       |              1 |
+------------------+----------------+
3 rows in set (0.00 sec)
```

mysql> SELECT first_name, age FROM students ORDER BY age ASC;
```
+------------+------+
| first_name | age  |
+------------+------+
| Priya      |   18 |
| Sneha      |   19 |
| Aniket     |   20 |
| Amit       |   21 |
```

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

mysql> SELECT UPPER(CONCAT(first_name, ' ', last_name)) AS full_name FROM students;
+---------------+
| full_name     |
+---------------+
| ANIKET KAMBLE |
| SNEHA SHARMA  |
| AMIT KUMAR    |
| PRIYA DESAI   |
+---------------+
4 rows in set (0.00 sec)

mysql> CREATE VIEW student_view AS SELECT s.student_id, s.first_name, s.last_name, d.dept_name,
s.email FROM students s JOIN departments d ON s.dept_id = d.dept_id;
Query OK, 0 rows affected (0.01 sec)

mysql> SELECT * FROM student_view;
+------------+------------+-----------+------------------+------------------+
| student_id | first_name | last_name | dept_name        | email            |
+------------+------------+-----------+------------------+------------------+
|          1 | Aniket     | Kamble    | Computer Science | aniket@gmail.com |
|          2 | Sneha      | Sharma    | Mechanical       | sneha@gmail.com  |
|          3 | Amit       | Kumar     | Computer Science | amit@gmail.com   |
|          4 | Priya      | Desai     | Electrical       | priya@gmail.com  |
+------------+------------+-----------+------------------+------------------+
4 rows in set (0.00 sec)

mysql> UPDATE students SET email = 'rohan123@gmail.com' WHERE first_name = 'Rohan';
Query OK, 0 rows affected (0.00 sec)
Rows matched: 0  Changed: 0  Warnings: 0

mysql> DELETE FROM students WHERE first_name = 'Amit';
Query OK, 1 row affected (0.01 sec)

mysql> SELECT student_id, first_name, dept_id FROM students;
+------------+------------+---------+
| student_id | first_name | dept_id |
+------------+------------+---------+
|          1 | Aniket     |       1 |
|          2 | Sneha      |       2 |
|          4 | Priya      |       3 |
+------------+------------+---------+
3 rows in set (0.00 sec)
```