

1. Create database students and execute various commands on it.

- a. CREATE DATABASE students;
- b. USE students;

2. Create a table of students with the fields student id, name, email and phone number.

```
CREATE TABLE students (  
    student_id INT PRIMARY KEY,  
    name VARCHAR(100),  
    email VARCHAR(100),  
    phone_number VARCHAR(15)  
);
```

```
INSERT INTO students (student_id, name, email, phone_number) VALUES  
(1, 'Alice Johnson', 'alice.johnson@example.com', '555-1234'),  
(2, 'Bob Smith', 'bob.smith@example.com', '555-5678'),  
(3, 'Charlie Brown', 'charlie.brown@example.com', '555-8765');
```

3. Create a table subject to store the list of subjects.

```
CREATE TABLE subject (  
    subject_id INT PRIMARY KEY,  
    subject_name VARCHAR(100)  
);
```

```
INSERT INTO subject (subject_id, subject_name) VALUES  
(1, 'Mathematics'),  
(2, 'Computer Science'),  
(3, 'Physics'),  
(4, 'Chemistry'),  
(5, 'Biology');
```

4. Create table marks to store marks of students for various subjects.

```
CREATE TABLE marks (  
    mark_id INT PRIMARY KEY,  
    student_id INT,  
    subject_id INT,  
    marks INT,  
    FOREIGN KEY (student_id) REFERENCES students(student_id),  
    FOREIGN KEY (subject_id) REFERENCES subject(subject_id)
```

);

```
INSERT INTO marks (mark_id, student_id, subject_id, marks) VALUES
(1, 1, 1, 85), -- Alice Johnson, Mathematics
(2, 1, 2, 90), -- Alice Johnson, Computer Science
(3, 2, 1, 78), -- Bob Smith, Mathematics
(4, 2, 3, 82), -- Bob Smith, Physics
(5, 3, 2, 88); -- Charlie Brown, Computer Science
```

5. Display the details of the tables created.

mysql> DESCRIBE students;

Field	Type	Null	Key	Default	Extra
student_id	int	NO	PRI	NULL	
name	varchar(100)	YES		NULL	
email	varchar(100)	YES		NULL	
phone_number	varchar(15)	YES		NULL	

mysql> DESCRIBE subject;

Field	Type	Null	Key	Default	Extra
subject_id	int	NO	PRI	NULL	
subject_name	varchar(100)	YES		NULL	

mysql> DESCRIBE marks;

Field	Type	Null	Key	Default	Extra
mark_id	int	NO	PRI	NULL	
student_id	int	YES	MUL	NULL	
subject_id	int	YES	MUL	NULL	
marks	int	YES		NULL	

6. Drop the tables created.

```
DROP TABLE IF EXISTS marks;
DROP TABLE IF EXISTS subject;
DROP TABLE IF EXISTS students;
```