

EXPERIMENT 2

DDL Commands with Constraints – PRIMARY, FOREIGN KEY, UNIQUE, CHECK, DEFAULT, NOT NULL

```
mysql> CREATE TABLE Students (  
->     StudentID INT PRIMARY KEY,      -- Primary Key  
->     Name VARCHAR(50) NOT NULL,  
->     Age INT  
-> );  
Query OK, 0 rows affected (0.06 sec)
```

```
mysql> CREATE TABLE Courses (  
->     CourseID INT PRIMARY KEY,  
->     CourseName VARCHAR(50) UNIQUE  
-> );  
Query OK, 0 rows affected (0.07 sec)
```

```
mysql>  
mysql> CREATE TABLE Enrollments (  
->     EnrollID INT PRIMARY KEY,  
->     StudentID INT,  
->     CourseID INT,  
->     FOREIGN KEY (StudentID) REFERENCES Students(StudentID),  
->     FOREIGN KEY (CourseID) REFERENCES Courses(CourseID)  
-> );  
Query OK, 0 rows affected (0.08 sec)
```

```
mysql> CREATE TABLE Teachers (  
->     TeacherID INT PRIMARY KEY,  
->     Email VARCHAR(100) UNIQUE      -- No duplicate emails allowed  
-> );  
Query OK, 0 rows affected (0.07 sec)
```

```
mysql> CREATE TABLE Library (  
->     BookID INT PRIMARY KEY,  
->     Title VARCHAR(100) NOT NULL,  
->     Copies INT CHECK (Copies >= 1)  -- Must have at least 1 copy  
-> );  
Query OK, 0 rows affected (0.03 sec)
```

```
mysql> CREATE TABLE Payments (  
->     PaymentID INT PRIMARY KEY,  
->     Amount DECIMAL(10,2) NOT NULL,  
->     Status VARCHAR(20) DEFAULT 'Pending'    -- Default value  
-> );
```

Query OK, 0 rows affected (0.06 sec)

```
mysql> INSERT INTO Payments (PaymentID, Amount) VALUES (1, 500.00);
```

Query OK, 1 row affected (0.01 sec)

```
mysql> SELECT * FROM Payments;
```

PaymentID	Amount	Status
1	500.00	Pending

1 row in set (0.00 sec)

```
mysql> CREATE TABLE Departments (  
->     DeptID INT PRIMARY KEY,  
->     DeptName VARCHAR(50) NOT NULL    -- Cannot be empty  
-> );
```

Query OK, 0 rows affected (0.04 sec)

```
mysql> |
```