

# Assignment 3

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## 1 Create a table Student with fields

- Enrollment No Number (6) Primary key [Constraint: Should have pattern U21CSXXX]
- Name Character (25) [Constraint: Only Alphabets allowed]
- Semester Number (3) [Constraint: Only Number allowed]
- DOB Date [Constraint: Only Date allowed]
- Admission Date Date [Constraint: Only Date allowed]
- Hostel Room Number (5) (Null values allowed) [Constraint: Only number allowed]
- Gender Boolean [Constraint: Not NULL]
- Address Varchar (50)
- Contact No Number(10) [Constraint: Only numbers]

1. Student table with all columns and rows.

```
mysql> select * from Students;
ERROR 1146 (42S02): Table 'svnit.students' doesn't exist
mysql> select * from Student;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Enrollment_No | Name | Semester | DOB | Admission_Date | Hostel_Room | Gender | Address | Contact_No |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| U21CS066 | A | 3 | 2003-03-20 | 2021-06-02 | 1 | 0 | Surat | 1111111111 |
| U21CS067 | Ba | 3 | 2003-04-20 | 2021-06-03 | 1 | 0 | Surat | 8111111181 |
| U21CS068 | Cb | 3 | 2003-05-05 | 2021-06-04 | 1 | 0 | Surat | 8811111181 |
| U21CS069 | Do | 3 | 2003-06-05 | 2021-06-05 | 4 | 1 | Surat | 9811111181 |
| U21CS070 | Fl | 3 | 2003-07-05 | 2021-06-06 | 6 | 0 | Mumbai | 7811111181 |
| U21CS071 | Hi | 3 | 2003-08-05 | 2021-06-07 | 7 | 1 | Panvel | 7811111181 |
| U21CS072 | Kli | 3 | 2002-08-05 | 2021-06-08 | 10 | 0 | Paris | 6811811181 |
| U21CS073 | Man | 3 | 2002-12-05 | 2021-06-09 | 11 | 1 | Sweden | 681181081 |
| U21CS075 | Ac | 3 | 2002-05-12 | 2021-06-19 | 12 | 0 | Italy | 689181081 |
| U21CS099 | Gs | 3 | 2002-05-05 | 2021-06-19 | 12 | 1 | Italy | 679181081 |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
10 rows in set (0.00 sec)

mysql> select Enrollment_No, Name from Student;
+-----+-----+
| Enrollment_No | Name |
+-----+-----+
| U21CS066 | A |
| U21CS067 | Ba |
| U21CS068 | Cb |
| U21CS069 | Do |
| U21CS070 | Fl |
| U21CS071 | Hi |
| U21CS072 | Kli |
| U21CS073 | Man |
| U21CS075 | Ac |
| U21CS099 | Gs |
+-----+-----+
10 rows in set (0.00 sec)

mysql> select * from Student where Semester = 4;
Empty set (0.00 sec)
```

2. Student details with columns Roll number and Name only.

Figure 1: Table Creation

```
garvitshah@Garvits-MacBook-Air ~-> mysql -u root -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 10
Server version: 8.0.32 MySQL Community Server - GPL

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> use SVNIT;
Database changed
mysql> show tables;
Empty set (0.00 sec)

mysql> create table Student(Enrollment_No char(6) check(Enrollment_No RLIKE'^U21CS[0-9][0-9][0-9]'), Name char(25) check(Name RLIKE'[a-z]*[A-Z]*'), Semester INT(3), DOB DATE, Admission_Date DATE, Hostel_Room INT(5), Gender BOOL NOT NULL, Address VARCHAR(50), Contact_No INT(10), PRIMARY KEY(Enrollment_No));
Query OK, 0 rows affected, 3 warnings (0.06 sec)

mysql> insert into Student values('U21CS066', 'A', 3, 2003-03-20, 2021-06-02, 001, 0, 'Surat', 1111111111);
ERROR 1406 (22001): Data too long for column 'Enrollment_No' at row 1
mysql> alter table Student CHANGE Enrollment_No Enrollment_No char(8) check(Enrollment_No RLIKE'^U21CS[0-9][0-9][0-9]');
Query OK, 0 rows affected (0.07 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

3. Student details of all the students who are in the 4th Semester.
4. Student details of all the students whose roll number is between 10 to 20.
5. Student details of all the students whose DOB is greater than 1st Jan 2002.
6. Student details of a student with enrollment number 'U21CS007'
7. Students who reside on the second floor in the hostel. [Hint: Hostel Room's initial number gives the floor]
8. Students whose date of birth is in the current month. [Hint: Find current month using system date and time]
9. Students whose name starts with 'S'

Figure 2: Value Insertion

```
mysql> insert into Student values('U21CS066', 'A', 3,'2003-03-20', '2021-06-02', 001, 0, 'Surat', 1111111111);
ERROR 1264 (22003): Out of range value for column 'Contact_No' at row 1
mysql> insert into Student values('U21CS066', 'A', 3,'2003-03-20', '2021-06-02', 001, 0, 'Surat', 111111111);
Query OK, 1 row affected (0.03 sec)

mysql> insert into Student values('U21CS067', 'Ba', 3,'2003-04-20', '2021-06-03', 01, 0, 'Surat', 8111111181);
ERROR 1264 (22003): Out of range value for column 'Contact_No' at row 1
mysql> insert into Student values('U21CS067', 'Ba', 3,'2003-04-20', '2021-06-03', 01, 0, 'Surat', 8111111181);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Student values('U21CS068', 'Cb', 3,'2003-05-05', '2021-06-04', 01, 0, 'Surat', 8811111181);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Student values('U21CS069', 'Do', 3,'2003-06-05', '2021-06-05', 04, 1, 'Surat', 9811111181);
Query OK, 1 row affected (0.00 sec)

mysql> insert into Student values('U21CS070', 'Fl', 3,'2003-07-05', '2021-06-06', 06, 0, 'Mumbai', 7811111181);
Query OK, 1 row affected (0.00 sec)

mysql> insert into Student values('U21CS071', 'Hi', 3,'2003-08-05', '2021-06-07', 07, 1, 'Panvel', 7811811181);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Student values('U21CS072', 'Kli', 3,'2002-08-05', '2021-06-08', 10, 0, 'Paris', 6811811181);
Query OK, 1 row affected (0.00 sec)

mysql> insert into Student values('U21CS073', 'Man', 3,'2002-12-05', '2021-06-09', 11, 1, 'Sweden', 681181081);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Student values('U21CS075', 'Ac', 3,'2002-05-12', '2021-06-19', 12, 0, 'Italy', 689181081);
Query OK, 1 row affected (0.00 sec)

mysql> insert into Student values('U21CS099', 'Gs', 3,'2002-05-05', '2021-06-19', 12, 1, 'Italy', 679181081);
Query OK, 1 row affected (0.00 sec)
```