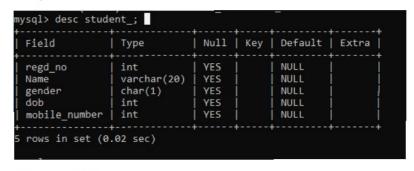# DBMS

Slot B

Exercise 1:

DDL commands-create,alter,drop

Create table:

Commands: create table student_

        (regd_no int,name varchar(20),gender char(1),dob int, mobile_number int);

Output:

```
mysql> desc student_;
+---------------+-------------+------+-----+---------+-------+
| Field         | Type        | Null | Key | Default | Extra |
+---------------+-------------+------+-----+---------+-------+
| regd_no       | int         | YES  |     | NULL    |       |
| Name          | varchar(20) | YES  |     | NULL    |       |
| gender        | char(1)     | YES  |     | NULL    |       |
| dob           | int         | YES  |     | NULL    |       |
| mobile_number | int         | YES  |     | NULL    |       |
+---------------+-------------+------+-----+---------+-------+
5 rows in set (0.02 sec)
```

Alter table:

Command:alter table student_(table name)

        Add age int;(constraint datatype)

Output:

```
mysql> alter table student_
    -> add age int;
Query OK, 0 rows affected (0.05 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> desc student_;
+---------------+-------------+------+-----+---------+-------+
| Field         | Type        | Null | Key | Default | Extra |
+---------------+-------------+------+-----+---------+-------+
| regd_no       | int         | YES  |     | NULL    |       |
| Name          | varchar(20) | YES  |     | NULL    |       |
| gender        | char(1)     | YES  |     | NULL    |       |
| dob           | int         | YES  |     | NULL    |       |
| mobile_number | int         | YES  |     | NULL    |       |
| age           | int         | YES  |     | NULL    |       |
+---------------+-------------+------+-----+---------+-------+
6 rows in set (0.01 sec)
```

Truncate:

```
mysql> truncate hostel_;
Query OK, 0 rows affected (0.04 sec)
```

Drop:

Exercise 2:

DDL commands with constraints:

Command:

```
mysql> alter table student_ add primary key(age);
Query OK, 0 rows affected (0.07 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

Output:

```
mysql> desc student_;
+---------------+-------------+------+-----+---------+-------+
| Field         | Type        | Null | Key | Default | Extra |
+---------------+-------------+------+-----+---------+-------+
| regd_no       | int         | YES  |     | NULL    |       |
| Name          | varchar(20) | YES  |     | NULL    |       |
| gender        | char(1)     | YES  |     | NULL    |       |
| dob           | int         | YES  |     | NULL    |       |
| mobile_number | int         | YES  |     | NULL    |       |
| age           | int         | NO   | PRI | NULL    |       |
+---------------+-------------+------+-----+---------+-------+
6 rows in set (0.01 sec)
```

Exercise 3;

DML Commands – INSERT, SELECT, UPDATE, DELETE

INSERT:

Commands:

```
mysql> insert into student_ values('1020192','nithish','M','2002','930289276','18');
Query OK, 1 row affected (0.02 sec)
```

```
mysql> insert into student_ values('192011342','jashwanth','M','2001','830189301','19');
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into student_ values('192011332','ramya','F','2000','830189301','20');
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into student_ values('192011011','anil','M','2003','830189301','17');
Query OK, 1 row affected (0.01 sec)
```

Output:

```
mysql> select *from student_;
+-----------+-----------+--------+------+---------------+------+
| regd_no   | Name      | gender | dob  | mobile_number | age  |
+-----------+-----------+--------+------+---------------+------+
| 192011011 | anil      | M      | 2003 |     830189301 | 17   |
|   1020192 | nithish   | M      | 2002 |     930289276 | 18   |
| 192011342 | jashwanth | M      | 2001 |     830189301 | 19   |
| 192011332 | ramya     | F      | 2000 |     830189301 | 20   |
+-----------+-----------+--------+------+---------------+------+
4 rows in set (0.01 sec)
```

Select;

Command:

```
mysql> select*from student_;
```

Select*(table_name);

Output:

```
mysql> select*from student_;
+-----------+-----------+--------+------+---------------+------+
| regd_no   | Name      | gender | dob  | mobile_number | age  |
+-----------+-----------+--------+------+---------------+------+
| 192011011 | anil      | M      | 2003 |     830189301 | 17   |
|   1020192 | nithish   | M      | 2002 |     930289276 | 18   |
| 192011342 | jashwanth | M      | 2001 |     830189301 | 19   |
| 192011332 | ramya     | F      | 2000 |     830189301 | 20   |
+-----------+-----------+--------+------+---------------+------+
4 rows in set (0.00 sec)
```

Delete:

Delete:

Command:

```
mysql> delete from student_
    -> where dob=2003;
Query OK, 1 row affected (0.01 sec)
```

Output:

```
mysql> select*from student;
ERROR 1146 (42S02): Table 'student_.student' doesn't exist
mysql> select*from student_;
+-----------+-----------+--------+------+---------------+-----+
| regd_no   | Name      | gender | dob  | mobile_number | age |
+-----------+-----------+--------+------+---------------+-----+
|   1020192 | nithish   | M      | 2002 |     930289276 |  18 |
| 192011342 | jashwanth | M      | 2001 |     830189301 |  19 |
| 192011332 | ramya     | F      | 2000 |     830189301 |  20 |
+-----------+-----------+--------+------+---------------+-----+
3 rows in set (0.01 sec)
```

Update;

Command:

```
mysql> update student_
    -> set name=192011469 where dob='2002';
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

Output:

```
mysql> select*from student_;
+-----------+-----------+--------+------+---------------+-----+
| regd_no   | Name      | gender | dob  | mobile_number | age |
+-----------+-----------+--------+------+---------------+-----+
|   1020192 | 192011469 | M      | 2002 |     930289276 |  18 |
| 192011342 | jashwanth | M      | 2001 |     830189301 |  19 |
| 192011332 | ramya     | F      | 2000 |     830189301 |  20 |
+-----------+-----------+--------+------+---------------+-----+
3 rows in set (0.01 sec)
```

Exercise 4;

Command:

Select*from student where gender='F';

```
mysql> select*from student_ where gender='F';
```

Exercise 4;

Command:

Select*from student where gender='F';

```
mysql> select*from student_ where gender='F';
```

Output:

```
mysql> select*from student_ where gender='F';
+-----------+-------+--------+------+---------------+-----+
| regd_no   | Name  | gender | dob  | mobile_number | age |
+-----------+-------+--------+------+---------------+-----+
| 192011332 | ramya | F      | 2000 |     830189301 | 20  |
+-----------+-------+--------+------+---------------+-----+
1 row in set (0.01 sec)
```

Command:

```
mysql> select*from student_ where name like'%sh';
```

Output:

```
+---------+---------+--------+------+---------------+-----+
| regd_no | Name    | gender | dob  | mobile_number | age |
+---------+---------+--------+------+---------------+-----+
| 1020192 | Nithish | M      | 2002 |     930289276 | 18  |
+---------+---------+--------+------+---------------+-----+
1 row in set (0.00 sec)
```

Command:

```
mysql> select*from student_ where name like'ra%';
```

Output:

```
mysql> select*from student_ where name like'ra%';
+-----------+-------+--------+------+---------------+-----+
| regd_no   | Name  | gender | dob  | mobile_number | age |
+-----------+-------+--------+------+---------------+-----+
| 192011332 | ramya | F      | 2000 |     830189301 | 20  |
+-----------+-------+--------+------+---------------+-----+
1 row in set (0.00 sec)
```

Command:

```
mysql> select*from student_ where name like'%sh';
```

Output:

```
+---------+---------+--------+------+---------------+-----+
| regd_no | Name    | gender | dob  | mobile_number | age |
+---------+---------+--------+------+---------------+-----+
| 1020192 | Nithish | M      | 2002 |     930289276 | 18  |
+---------+---------+--------+------+---------------+-----+
1 row in set (0.00 sec)
```

Command:

```
mysql> select*from student_ where name like'ra%';
```

Output:

```
mysql> select*from student_ where name like'ra%';
+-----------+-------+--------+------+---------------+-----+
| regd_no   | Name  | gender | dob  | mobile_number | age |
+-----------+-------+--------+------+---------------+-----+
| 192011332 | ramya | F      | 2000 |     830189301 | 20  |
+-----------+-------+--------+------+---------------+-----+
1 row in set (0.00 sec)
```

Exercise 5;

Between;

Command:

```
mysql> select*from student_ where age between 13 and 19;
```

Output:

```
mysql> select*from student_ where age between 13 and 19;
+-----------+-----------+--------+------+---------------+-----+
| regd_no   | Name      | gender | dob  | mobile_number | age |
+-----------+-----------+--------+------+---------------+-----+
|   1020192 | Nithish   | M      | 2002 |     930289276 | 18  |
| 192011342 | jashwanth | M      | 2001 |     830189301 | 19  |
+-----------+-----------+--------+------+---------------+-----+
2 rows in set (0.00 sec)
```

In: