# MYSQL PART-2

mysql> show databases;

```
+--------------------+
| Database           |
+--------------------+
| information_schema |
| legion             |
| mysql              |
| nit                |
| nit2               |
| performance_schema |
| sys                |
+--------------------+
7 rows in set (0.00 sec)
```

mysql> use nit;

Database changed

mysql> show table;

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '' at line 1

mysql> show tables;

```
+---------------+
| Tables_in_nit |
+---------------+
| imp           |
| student       |
+---------------+
```

2 rows in set (1.69 sec)


mysql> use nit2;

Database changed

mysql> show tables;

+----------------+

| Tables_in_nit2 |

+----------------+

| student        |

+----------------+

1 row in set (0.00 sec)


mysql> select * from student;

+---------+----+---------+-------+

| name    | id | address | marks |

+---------+----+---------+-------+

| prakash | 12 | hyd     |    78 |

| cathy   | 17 | delhi   |    90 |

| kodi    | 40 | bng     |    66 |

| alex    | 45 | chennai |    79 |

| dolly   | 48 | pune    |    67 |

| chancy  | 78 | mumbai  |    34 |

+---------+----+---------+-------+

6 rows in set (1.69 sec)


mysql> alter table student add phoneNo int;

Query OK, 0 rows affected (0.38 sec)

Records: 0  Duplicates: 0  Warnings: 0

```
mysql> select * from student;

+---------+----+---------+-------+---------+
| name    | id | address | marks | phoneNo |
+---------+----+---------+-------+---------+
| prakash | 12 | hyd     |    78 |    NULL |
| cathy   | 17 | delhi   |    90 |    NULL |
| kodi    | 40 | bng     |    66 |    NULL |
| alex    | 45 | chennai |    79 |    NULL |
| dolly   | 48 | pune    |    67 |    NULL |
| chancy  | 78 | mumbai  |    34 |    NULL |
+---------+----+---------+-------+---------+
6 rows in set (0.00 sec)


mysql> update student set phoneNo=123;
Query OK, 6 rows affected (0.01 sec)
Rows matched: 6  Changed: 6  Warnings: 0


mysql> select * from student;

+---------+----+---------+-------+---------+
| name    | id | address | marks | phoneNo |
+---------+----+---------+-------+---------+
| prakash | 12 | hyd     |    78 |     123 |
| cathy   | 17 | delhi   |    90 |     123 |
| kodi    | 40 | bng     |    66 |     123 |
| alex    | 45 | chennai |    79 |     123 |
| dolly   | 48 | pune    |    67 |     123 |
| chancy  | 78 | mumbai  |    34 |     123 |
```

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


mysql> update student set phoneNo=456 where id=12;

Query OK, 1 row affected (0.02 sec)

Rows matched: 1  Changed: 1  Warnings: 0


mysql> select * from student;

```
+---------+----+---------+-------+---------+
| name    | id | address | marks | phoneNo |
+---------+----+---------+-------+---------+
| prakash | 12 | hyd     |   78  |    456  |
| cathy   | 17 | delhi   |   90  |    123  |
| kodi    | 40 | bng     |   66  |    123  |
| alex    | 45 | chennai |   79  |    123  |
| dolly   | 48 | pune    |   67  |    123  |
| chancy  | 78 | mumbai  |   34  |    123  |
+---------+----+---------+-------+---------+
```
6 rows in set (0.00 sec)

mysql> desc student;

```
+---------+-------------+------+-----+---------+-------+
| Field   | Type        | Null | Key | Default | Extra |
+---------+-------------+------+-----+---------+-------+
| name    | varchar(30) | YES  |     | NULL    |       |
| id      | int         | NO   | PRI | NULL    |       |
| address | varchar(50) | YES  |     | NULL    |       |
| marks   | int         | YES  |     | NULL    |       |
| phoneNo | int         | YES  |     | NULL    |       |
```

```
+---------+-------------+------+-----+---------+-------+
```

5 rows in set (1.78 sec)


mysql> alter table students modify column name varchar(60);

ERROR 1146 (42S02): Table 'nit2.students' doesn't exist

mysql> alter table student modify column name varchar(60);

Query OK, 0 rows affected (0.28 sec)

Records: 0  Duplicates: 0  Warnings: 0


mysql> desc student;

```
+---------+-------------+------+-----+---------+-------+
| Field   | Type        | Null | Key | Default | Extra |
+---------+-------------+------+-----+---------+-------+
| name    | varchar(60) | YES  |     | NULL    |       |
| id      | int         | NO   | PRI | NULL    |       |
| address | varchar(50) | YES  |     | NULL    |       |
| marks   | int         | YES  |     | NULL    |       |
| phoneNo | int         | YES  |     | NULL    |       |
+---------+-------------+------+-----+---------+-------+
```

5 rows in set (0.00 sec)


mysql> alter table student drop column phoneNo;

Query OK, 0 rows affected (1.65 sec)

Records: 0  Duplicates: 0  Warnings: 0


mysql> select * from student;

```
+---------+----+---------+-------+
| name    | id | address | marks |
```

```
+---------+----+---------+-------+
| prakash | 12 | hyd     |    78 |
| cathy   | 17 | delhi   |    90 |
| kodi    | 40 | bng     |    66 |
| alex    | 45 | chennai |    79 |
| dolly   | 48 | pune    |    67 |
| chancy  | 78 | mumbai  |    34 |
+---------+----+---------+-------+
6 rows in set (0.00 sec)


mysql> delete from student where name='kodi';
Query OK, 1 row affected (0.00 sec)


mysql> select * from student;
+---------+----+---------+-------+
| name    | id | address | marks |
+---------+----+---------+-------+
| prakash | 12 | hyd     |    78 |
| cathy   | 17 | delhi   |    90 |
| alex    | 45 | chennai |    79 |
| dolly   | 48 | pune    |    67 |
| chancy  | 78 | mumbai  |    34 |
+---------+----+---------+-------+
5 rows in set (0.00 sec)


mysql> select sum(marks) from student;
+------------+
| sum(marks) |
```

```
+------------+
|        348 |
+------------+
1 row in set (0.01 sec)
```

mysql> select avg(marks) from student;

```
+------------+
| avg(marks) |
+------------+
|    69.6000 |
+------------+
1 row in set (0.00 sec)
```

mysql> select count(name) from student;

```
+-------------+
| count(name) |
+-------------+
|           5 |
+-------------+
1 row in set (0.00 sec)
```

mysql> select max(marks) from student;

```
+------------+
| max(marks) |
+------------+
|         90 |
+------------+
1 row in set (0.00 sec)
```

```
mysql> select min(marks) from student;

+------------+

| min(marks) |

+------------+

|         34 |

+------------+

1 row in set (0.01 sec)


mysql> select * from student order by marks;

+---------+----+---------+-------+

| name    | id | address | marks |

+---------+----+---------+-------+

| chancy  | 78 | mumbai  |    34 |

| dolly   | 48 | pune    |    67 |

| prakash | 12 | hyd     |    78 |

| alex    | 45 | chennai |    79 |

| cathy   | 17 | delhi   |    90 |

+---------+----+---------+-------+

5 rows in set (0.00 sec)


mysql> select * from student order by marks desc;

+---------+----+---------+-------+

| name    | id | address | marks |

+---------+----+---------+-------+

| cathy   | 17 | delhi   |    90 |

| alex    | 45 | chennai |    79 |

| prakash | 12 | hyd     |    78 |
```

```
| dolly  | 48 | pune   |   67 |
| chancy | 78 | mumbai |   34 |
+--------+----+--------+------+
5 rows in set (0.00 sec)


mysql> select * from student where name like 'a%';
+------+----+--------+------+
| name | id | address | marks |
+------+----+--------+------+
| alex | 45 | chennai |   79 |
+------+----+--------+------+
1 row in set (0.01 sec)


mysql> select * from student where name like '%y';
+--------+----+--------+------+
| name   | id | address | marks |
+--------+----+--------+------+
| cathy  | 17 | delhi  |   90 |
| dolly  | 48 | pune   |   67 |
| chancy | 78 | mumbai |   34 |
+--------+----+--------+------+
3 rows in set (0.00 sec)


mysql> select * from student where name like '_a%';
+-------+----+--------+------+
| name  | id | address | marks |
+-------+----+--------+------+
| cathy | 17 | delhi  |   90 |
```

```
+-------+----+---------+-------+
```

1 row in set (0.00 sec)


mysql> select * from student where name like '%s_';

```
+---------+----+---------+-------+
| name    | id | address | marks |
+---------+----+---------+-------+
| prakash | 12 | hyd     |    78 |
+---------+----+---------+-------+
```

1 row in set (0.00 sec)


mysql> create table emp(id int not null primary key,salary int,empcode int,name varchar(30));

Query OK, 0 rows affected (1.71 sec)


mysql> insert into emp values(12, 20000,102,'aman'),(23,60000m,104,'arup'),(78,30000,105,'max'),

    -> (80,25000,103,'ram'),(34,90000,106,'sam');

ERROR 1054 (42S22): Unknown column '60000m' in 'field list'

mysql> insert into emp values(12, 200000,102,'aman'),(23,60000,104,'arup'),(78,30000,105,'max'),

    -> (80,25000,103,'ram'),(34,90000,106,'sam');

Query OK, 5 rows affected (0.00 sec)

Records: 5  Duplicates: 0  Warnings: 0


mysql> select * from emp;

```
+----+--------+---------+------+
| id | salary | empcode | name |
+----+--------+---------+------+
```

```
| 12 | 200000 |    102 | aman |
| 23 |  60000 |    104 | arup |
| 34 |  90000 |    106 | sam  |
| 78 |  30000 |    105 | max  |
| 80 |  25000 |    103 | ram  |
+----+--------+---------+------+
5 rows in set (0.00 sec)


mysql> select * from student;
+---------+----+---------+-------+
| name    | id | address | marks |
+---------+----+---------+-------+
| prakash | 12 | hyd     |    78 |
| cathy   | 17 | delhi   |    90 |
| alex    | 45 | chennai |    79 |
| dolly   | 48 | pune    |    67 |
| chancy  | 78 | mumbai  |    34 |
+---------+----+---------+-------+
5 rows in set (0.00 sec)
mysql> select * from emp;
+----+--------+---------+------+
| id | salary | empcode | name |
+----+--------+---------+------+
| 12 | 200000 |    102 | aman |
| 23 |  60000 |    104 | arup |
| 34 |  90000 |    106 | sam  |
| 78 |  30000 |    105 | max  |
| 80 |  25000 |    103 | ram  |
```

```
+----+--------+---------+------+
```

5 rows in set (0.00 sec)


mysql> select * from student inner join emp on student.id=emp.id;

```
+---------+----+---------+-------+----+--------+---------+------+
| name    | id | address | marks | id | salary | empcode | name |
+---------+----+---------+-------+----+--------+---------+------+
| prakash | 12 | hyd     |    78 | 12 | 200000 |     102 | aman |
| chancy  | 78 | mumbai  |    34 | 78 |  30000 |     105 | max  |
+---------+----+---------+-------+----+--------+---------+------+
```

2 rows in set (0.00 sec)


mysql> select * from student;

```
+---------+----+---------+-------+
| name    | id | address | marks |
+---------+----+---------+-------+
| prakash | 12 | hyd     |    78 |
| cathy   | 17 | delhi   |    90 |
| alex    | 45 | chennai |    79 |
| dolly   | 48 | pune    |    67 |
| chancy  | 78 | mumbai  |    34 |
+---------+----+---------+-------+
```

5 rows in set (0.00 sec)


mysql> select * from emp;

```
+----+--------+---------+------+
| id | salary | empcode | name |
+----+--------+---------+------+
```

```
| 12 | 200000 |    102 | aman |
| 23 |  60000 |    104 | arup |
| 34 |  90000 |    106 | sam  |
| 78 |  30000 |    105 | max  |
| 80 |  25000 |    103 | ram  |
+----+--------+---------+------+
```

5 rows in set (0.00 sec)

mysql> select * from student left join emp on student.id=emp.id;

```
+---------+----+---------+-------+------+--------+---------+------+
| name    | id | address | marks | id   | salary | empcode | name |
+---------+----+---------+-------+------+--------+---------+------+
| prakash | 12 | hyd     |   78  | 12   | 200000 |    102  | aman |
| cathy   | 17 | delhi   |   90  | NULL | NULL   |   NULL  | NULL |
| alex    | 45 | chennai |   79  | NULL | NULL   |   NULL  | NULL |
| dolly   | 48 | pune    |   67  | NULL | NULL   |   NULL  | NULL |
| chancy  | 78 | mumbai  |   34  | 78   | 30000  |    105  | max  |
+---------+----+---------+-------+------+--------+---------+------+
```

5 rows in set (0.00 sec)

mysql> select * from student right join emp on student.id=emp.id;

```
+---------+------+---------+-------+----+--------+---------+------+
| name    | id   | address | marks | id | salary | empcode | name |
+---------+------+---------+-------+----+--------+---------+------+
| prakash |  12  | hyd     |   78  | 12 | 200000 |    102  | aman |
| NULL    | NULL | NULL    | NULL  | 23 | 60000  |    104  | arup |
| NULL    | NULL | NULL    | NULL  | 34 | 90000  |    106  | sam  |
| chancy  |  78  | mumbai  |   34  | 78 | 30000  |    105  | max  |
| NULL    | NULL | NULL    | NULL  | 80 | 25000  |    103  | ram  |
+---------+------+---------+-------+----+--------+---------+------+
```

5 rows in set (0.00 sec)

mysql> select * from student cross join emp;

```
+---------+----+---------+-------+----+--------+---------+------+
| name    | id | address | marks | id | salary | empcode | name |
+---------+----+---------+-------+----+--------+---------+------+
| chancy  | 78 | mumbai  |    34 | 12 | 200000 |     102 | aman |
| dolly   | 48 | pune    |    67 | 12 | 200000 |     102 | aman |
| alex    | 45 | chennai |    79 | 12 | 200000 |     102 | aman |
| cathy   | 17 | delhi   |    90 | 12 | 200000 |     102 | aman |
| prakash | 12 | hyd     |    78 | 12 | 200000 |     102 | aman |
| chancy  | 78 | mumbai  |    34 | 23 |  60000 |     104 | arup |
| dolly   | 48 | pune    |    67 | 23 |  60000 |     104 | arup |
| alex    | 45 | chennai |    79 | 23 |  60000 |     104 | arup |
| cathy   | 17 | delhi   |    90 | 23 |  60000 |     104 | arup |
| prakash | 12 | hyd     |    78 | 23 |  60000 |     104 | arup |
| chancy  | 78 | mumbai  |    34 | 34 |  90000 |     106 | sam  |
| dolly   | 48 | pune    |    67 | 34 |  90000 |     106 | sam  |
| alex    | 45 | chennai |    79 | 34 |  90000 |     106 | sam  |
| cathy   | 17 | delhi   |    90 | 34 |  90000 |     106 | sam  |
| prakash | 12 | hyd     |    78 | 34 |  90000 |     106 | sam  |
| chancy  | 78 | mumbai  |    34 | 78 |  30000 |     105 | max  |
| dolly   | 48 | pune    |    67 | 78 |  30000 |     105 | max  |
| alex    | 45 | chennai |    79 | 78 |  30000 |     105 | max  |
| cathy   | 17 | delhi   |    90 | 78 |  30000 |     105 | max  |
| prakash | 12 | hyd     |    78 | 78 |  30000 |     105 | max  |
| chancy  | 78 | mumbai  |    34 | 80 |  25000 |     103 | ram  |
| dolly   | 48 | pune    |    67 | 80 |  25000 |     103 | ram  |
| alex    | 45 | chennai |    79 | 80 |  25000 |     103 | ram  |
```

```
| cathy   | 17 | delhi   |   90 | 80 | 25000 |   103 | ram  |
| prakash | 12 | hyd     |   78 | 80 | 25000 |   103 | ram  |
+---------+----+---------+-------+----+--------+---------+------+
```
25 rows in set (0.00 sec)