



**SAVEETHA INSTITUTE OF MEDICAL AND  
TECHNICAL SCIENCES**

**SAVEETHA SCHOOL OF ENGINEERING**

**Department of Computer Science and  
Engineering &**

**Information technology**

**CS016 - Database Management**

**SystemsLab Manual**

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#### CREATING TABLE

#### SYNTAX:

**Patan basheer khan**  
**192011188/cse**

create table stud(regno int,stud\_name varchar(10),DOB int,Gender varchar(2));

desc stud;

```
MySQL 5.5 Command Line Cli x + -
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owners.

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

mysql> create database d;
Query OK, 1 row affected (0.01 sec)

mysql> use d;
Database changed
mysql> create table stud(regno int,stud_name varchar(10),DOB int,Gender varchar(2));
Query OK, 0 rows affected (0.06 sec)

mysql> select *from stud
-> ;
Empty set (0.04 sec)

mysql> desc stud;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| regno | int(11) | YES | | NULL | |
| stud_name | varchar(10) | YES | | NULL | |
| DOB | int(11) | YES | | NULL | |
| Gender | varchar(2) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.05 sec)

mysql> |
```

## INSERTING VALUES

### SYNTAX:

create table stu(regno int,stu\_name varchar(10),dob int,gender varchar(2));

insert stu values(192011188,'basheer',07122002,'m');

insert stu values(192011397,'madhu',07122002,'m');

insert stu values(192011237,'madhu',8122002,'m');

select \*from stu;

### OUTPUT:

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```
MySQL 5.5 Command Line Client
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> create database e;
Query OK, 1 row affected (0.00 sec)

mysql> use e;
Database changed
mysql> create table stu(regno int,stu_name varchar(10),dob int,gender varchar(2));
Query OK, 0 rows affected (0.03 sec)

mysql> insert stu values(192011188,'basheer',07 12 2002,'m');
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 '12 2002,'m')'
at line 1
mysql> insert stu values(192011188,'basheer',07122002,'m');
Query OK, 1 row affected (0.00 sec)

mysql> insert stu values(192011397,'madhu',07122002,'m');
Query OK, 1 row affected (0.00 sec)

mysql> insert stu values(192011237,'madhu',8122002,'m');
Query OK, 1 row affected (0.00 sec)

mysql> insert stu values(192011244,'althaf',9122002,'m');
Query OK, 1 row affected (0.00 sec)

mysql> select *from stu;
+-----+-----+-----+-----+
| regno | stu_name | dob | gender |
+-----+-----+-----+-----+
| 192011188 | basheer | 7122002 | m |
| 192011397 | madhu | 7122002 | m |
| 192011237 | madhu | 8122002 | m |
| 192011244 | althaf | 9122002 | m |
+-----+-----+-----+-----+
4 rows in set (0.02 sec)

mysql>
```

### ALTER TABLE

#### SYNTAX:

alter table stu add age int;

insert stu values(192011244,'althaf',9122002,'m',20);

insert stu values(192011188,'basheer',07122002,'m',20);

insert stu values(192011237,'madhu',8122002,'m',20);

select \*from stu;

#### OUTPUT:

```
mysql> alter table stu add age int;
Query OK, 4 rows affected (0.03 sec)
Records: 4 Duplicates: 0 Warnings: 0

mysql> insert stu values(192011244,'althaf',9122002,'m',20);
Query OK, 1 row affected (0.00 sec)

mysql> insert stu values(192011188,'basheer',07122002,'m',20);
Query OK, 1 row affected (0.00 sec)

mysql> insert stu values(192011237,'madhu',8122002,'m',20);
Query OK, 1 row affected (0.02 sec)

mysql> select *from stu;
+-----+-----+-----+-----+-----+
| regno | stu_name | dob | gender | age |
+-----+-----+-----+-----+-----+
| 192011188 | basheer | 7122002 | m | NULL |
| 192011397 | madhu | 7122002 | m | NULL |
| 192011237 | madhu | 8122002 | m | NULL |
| 192011244 | althaf | 9122002 | m | NULL |
| 192011244 | althaf | 9122002 | m | 20 |
| 192011188 | basheer | 7122002 | m | 20 |
| 192011237 | madhu | 8122002 | m | 20 |
+-----+-----+-----+-----+-----+
7 rows in set (0.00 sec)
```

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## UPDATING VALUES

### SYNTAX:

```
update stu set stu_name='monohar'where regno=192011397;  
select *from stu;
```

### OUTPUT:

```
mysql> update stu set stu_name='monohar'where regno=192011397;  
Query OK, 1 row affected (0.01 sec)  
Rows matched: 1  Changed: 1  Warnings: 0  
  
mysql> select *from stu;  
+-----+-----+-----+-----+-----+  
| regno   | stu_name | dob    | gender | age  |  
+-----+-----+-----+-----+-----+  
| 192011188 | basheer  | 7122002 | m      | NULL |  
| 192011397 | monohar  | 7122002 | m      | NULL |  
| 192011237 | madhu    | 8122002 | m      | NULL |  
| 192011244 | althaf   | 9122002 | m      | NULL |  
| 192011244 | althaf   | 9122002 | m      | 20   |  
| 192011188 | basheer  | 7122002 | m      | 20   |  
| 192011237 | madhu    | 8122002 | m      | 20   |  
+-----+-----+-----+-----+-----+  
7 rows in set (0.00 sec)  
  
mysql> _
```

## DELETEING VALUES IN TABLE

### SYNTAX:

```
delete from stu where stu_name='madhu';  
delete from stu where stu_name='althaf';  
select *from stu;
```

### OUTPUT:

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```
mysql> delete from stu where stu_name='madhu';
Query OK, 2 rows affected (0.00 sec)

mysql> delete from stu where stu_name='althaf';
Query OK, 2 rows affected (0.00 sec)

mysql> select *from stu;
+-----+-----+-----+-----+-----+
| regno   | stu_name | dob      | gender | age  |
+-----+-----+-----+-----+-----+
| 192011188 | basheer  | 7122002  | m      | NULL |
| 192011397 | monohar  | 7122002  | m      | NULL |
| 192011188 | basheer  | 7122002  | m      | 20   |
+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

## VIEW TABLE

### SYNTAX:

create view student\_view as select student\_name,marks and subject from student;

select \*from student;

### OUTPUT:

```
mysql> create view student_view as select student_name,marks and subject from student;
Query OK, 0 rows affected (0.00 sec)

mysql> select *from student;
+-----+-----+-----+-----+-----+
| student_name | course | semester | marks | subject |
+-----+-----+-----+-----+-----+
| basheer      | 1      | coo1     | 100   | english |
| madhu        | 2      | coo2     | 139   | physics |
| monohar      | 3      | coo3     | 159   | physics |
| althaf       | 5      | coo4     | 170   | maths   |
| reehana      | 4      | coo5     | 150   | chemister |
| vithesh      | 6      | csa6     | 175   | database |
+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

## INDEX, SEQUENCE

### SYNTAX:

create index student\_name on student(student\_name);

show index from student;

### OUTPUT:

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```
mysql> create view student_view as select student_name,marks and subject;
ERROR 1054 (42S22): Unknown column 'student_name' in 'field list'
mysql> create view student_view as select student_name,marks and subject from student;
Query OK, 0 rows affected (0.00 sec)

mysql> select *from student;
+-----+-----+-----+-----+-----+
| student_name | course | semester | marks | subject |
+-----+-----+-----+-----+-----+
| basheer      | 1      | coo1      | 100    | english  |
| madhu        | 2      | coo2      | 139    | physics  |
| monohar      | 3      | coo3      | 159    | physics  |
| althaf       | 5      | coo4      | 170    | maths    |
| reehana      | 4      | coo5      | 150    | chemister|
| vithesh      | 6      | csa6      | 175    | database |
+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)

mysql> create index student_name on student(student_name);
Query OK, 0 rows affected (0.03 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> show index from student;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Table | Non_unique | Key_name | Seq_in_index | Column_name | Collation | Cardinality | Sub_part | Packed | Null | Index_type | Comment | Index_comment |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| student | 1 | student_name | 1 | student_name | A | 6 | NULL | NULL | YES | BTREE | | |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.09 sec)
```

## SELECT with various clause \_BETWEEN,IN,AGGREGATE FUNCTION

### SYNTAX:

create table student(student\_name varchar(10),course varchar(10),semester varchar (10),marks int ,subject varchar(10));

insert into student values('basheer',1,'coo1',100,'english');

insert into student values('madhu',2,'coo2',139,'physics');

insert into student values('monohar',3,'coo3',159,'physics')

insert into student values('althaf',5,'coo4',170,'maths');

insert into student values('reehana',4,'coo5',150,'chemister');

insert into student values('vithesh',6,'csa6',175,'database');

select \*from student;

### OUTPUT:

```
MySQL 5.5 Command Line Client
Query OK, 1 row affected (0.00 sec)

mysql> use f;
Database changed
mysql> create table student(student_name varchar(10),course varchar(10),semester varchar (10),marks int ,subject varchar(10));
Query OK, 0 rows affected (0.01 sec)

mysql> insert into student values('basheer',1,'coo1',100,'english');
Query OK, 1 row affected (0.02 sec)

mysql> insert into student values('madhu',2,'coo2',139,'physics');
Query OK, 1 row affected (0.00 sec)

mysql> insert into student values('monohar',3,'coo3',159,'physics');
Query OK, 1 row affected (0.00 sec)

mysql> insert into student values('althaf',5,'coo4',170,'maths');
Query OK, 1 row affected (0.00 sec)

mysql> insert into student values('reehana',4,'coo5',150,'chemister');
Query OK, 1 row affected (0.00 sec)

mysql> insert into student values('vithesh',6,'csa6',175,'database');
Query OK, 1 row affected (0.00 sec)

mysql> select *from student;
+-----+-----+-----+-----+-----+
| student_name | course | semester | marks | subject |
+-----+-----+-----+-----+-----+
| basheer      | 1      | coo1      | 100    | english  |
| madhu        | 2      | coo2      | 139    | physics  |
| monohar      | 3      | coo3      | 159    | physics  |
| althaf       | 5      | coo4      | 170    | maths    |
| reehana      | 4      | coo5      | 150    | chemister|
| vithesh      | 6      | csa6      | 175    | database |
+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

select min(marks)from student where course='coo1';

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```
mysql> select min(marks)from student where course='cool';  
+-----+  
| min(marks) |  
+-----+  
|          NULL |  
+-----+  
1 row in set (0.02 sec)
```