

System tables and views

```
mysql> use information_schema;
Database changed
mysql> show tables;
79 tables
```

#####DML not allowed: insert,update,delete

#INSIDE ROOT USER

1.CREATE VIEW:

```
mysql> create view v1
-> as
-> select * from student;
```

```
mysql> commit;
```

```
mysql> select * from v1;
```

roll	name	age
1	varsha	12
2	reema	4
3	varshulii	17
4	shulii	10

2.Give permission to scott@localhost to select v1:

```
mysql> grant select on stud.v1 to scott@localhost;
```

```
commit;
```

3.IN SCOTT@LOCALHOST:

```
*mysql> select * from v1;
```

roll	name	age
1	varsha	12
2	reema	4
3	varshulii	17
4	shulii	10

```
mysql> update v1 set roll=4 where rill=4;
```

```
ERROR 1142 (42000): UPDATE command denied to user 'scott'@'localhost' for table 'v1'
```

```
mysql> alter table v1 add sal int;
```

```
ERROR 1142 (42000): ALTER command denied to user 'scott'@'localhost' for table 'v1'
```

```
mysql> insert into v1 values(2,'aa',45);
```

```
ERROR 1142 (42000): INSERT command denied to user 'scott'@'localhost' for table 'v1'
```

```
mysql> delete from v1;
```

```
ERROR 1142 (42000): DELETE command denied to user 'scott'@'localhost' for table 'v1'
```

```
mysql> drop table v1;
```

```
ERROR 1142 (42000): DROP command denied to user 'scott'@'localhost' for table 'v1'
```

Give permission to 2 users:

```
mysql> grant select on stud.v1 to scott@localhost,shubhangi@localhost;
```

Give permission to public:

```
mysql> grant select on stud.v1 to public;
```

****CHECK CONSTRAINT SAME FOR ALL****

```
mysql> create view v2 as select * from student where roll=2;
```

```
mysql> select * from v2;
```

roll	name	age
2	reema	4
2	aa	45

BUT

```
mysql> insert into v2 values(1,'shu',4);
```

WE ARE ABLE TO INSERT NEW ROW

****BUT WITH CHECK OPTION****

WE CANNOT ABLE INSERT NEW ROW

```
1.mysql> create view v2 as select * from student where roll=2 with check option;
```

```
2.mysql> insert into v2 values(1,'shu',4);
```

ERROR 1369 (HY000): CHECK OPTION failed 'stud.v2'

```
mysql> select * from v2;
```

roll	name	age
2	reema	4
2	aa	45

SHOW WHICH IS TABLE AND WHICH IS VIEW::

=>

```
mysql> show full tables;
```

Tables_in_stud	Table_type
student	BASE TABLE
v1	VIEW
v2	VIEW

```
mysql> select * from student;
```

roll	name	age
1	varsha	12
2	reema	4
3	varshulii	17
5	shulii	10
2	aa	45

```
mysql> select * from v2;
+-----+-----+-----+
| roll | name | age |
+-----+-----+-----+
| 2 | reema | 4 |
| 2 | aa | 45 |
+-----+-----+-----+
```

#CREATE OR REPLACE VIEW::

//IF VIEW V2 IS NOT THERE THEN CREATE OR IF IT IS ALREADY THERE IT WILL
OVERWRITE VALUES

```
1.mysql> create or replace view v2 as select name,age*2 'newage' from student;
```

//IT WILL ADD ALL ROWS FROM STUDENT TABLE IF THEY ARE ALREADY THERE IT WILL
OVERWRITE

```
2.mysql> select * from v2;
```

```
+-----+-----+
| name | newage |
+-----+-----+
| varsha | 24 |
| reema | 8 |
| varshulii | 34 |
| shulii | 20 |
| aa | 90 |
| shu | 8 |
+-----+-----+
```

6 rows in set (0.00 sec)


```
mysql> create or replace view v2 as select upper(name) ,age*2 from student;
```

```
mysql> select * from v2;
```

```
+-----+-----+
| upper(name) | age*2 |
+-----+-----+
| VARSHA | 24 |
| REEMA | 8 |
| VARSHULII | 34 |
| SHULII | 20 |
| AA | 90 |
| SHU | 8 |
+-----+-----+
```

6 rows in set (0.00 sec)