Database with the table as well as virtual table or view

```
nysql> use apartment_managedb;
Oatabase changed
nysql> show tables;
 Tables_in_apartment_managedb
 admin
 balance
 building
 complaint
 customer
 customer detail
 feedback
 register
 registration
 reset_passw
 room
 room build
l2 rows in set (0.04 sec)
```

Begin The Transaction

```
mysql> START TRANSACTION;
Query OK, 0 rows affected (0.00 sec)
```

Note → This command means that the transaction state has been initiated as begin

```
ysql> SELECT * FROM BUILDING;
 build_id | b_name
                                       address
                                                                     | no_of_rooms | pic_name
                                                                                                              USER_ID
                                       Lucknow, UP
Rohini Sector-J,Delhi
Sector-45,Faridabad
                                                                                       build1.jpg
 B2324
              Imperial Building
 82344
              Sangam Buildings
                                                                                       build2.jpg
              LOTUS BUILDING
                                                                                       build_lotus.jpg
 B2564
 B2754
              ZOLO Building
                                       BTM-Layout, Bangalore
                                                                                       build3.jpg
                                                                                                               98354
 B3442
                                                                                       build_emerals.jpg
              Emerald Home
                                       B-43, Vasant Kunj
                                                                                                               189234
                                       Sector-125, Noida
              Galaxy Building
                                                                                       build_galaxy.jpg
                                       Sector-56, Gurgaon
                                                                                       build_lucky.jpg
 B5652
                                                                                                               983242
              Lucky Homes
              Rajdharam Building
                                       Sector-56, Greater Noida
                                                                                       build raj.jpg
 BFG64
 rows in set (0.07 sec)
ysql> UPDATE BUILDING SET NO_OF_ROOMS=10 WHERE BUIILD_ID='B2324';
RROR 1854 (42522): Unknown column 'BUIILD_ID' in 'where clause'
mysql> UPDATE BUILDING SET NO_0F_ROOMS=10 WHERE BUILD_ID='82324';
Query OK, 1 row affected (0.04 sec)
Lows matched: 1 Changed: 1 Warnings: 0
mysql> INSERT INTO BUILDING VALUES('87698','Confident Home','Flat No-123,Kochi,Kerala',34,'confident.jpg',65323);
Query OK, 1 row affected (0.04 sec)
ysql> SELECT * FROM BUILDING;
 build_id | b_name
                                       address
                                                                      | no_of_rooms | pic_name
                                                                                                              USER_ID |
                                       Lucknow, UP
Rohini Sector-3,Delhi
Sector-45,Faridabad
              Imperial Building
                                                                                        build1.jpg
 82324
 B2344
              Sangam Buildings
                                                                                        build2.jpg
              LOTUS BUILDING
                                                                                        build_lotus.jpg
              ZOLO Building
                                                                                        build3.jpg
 B2754
                                       BTM-Layout,Bangalore
                                                                                                                98354
              Emerald Home
                                                                                        build_emerals.jpg
 B3442
                                       B-43, Vasant Kunj
                                                                                   4
                                                                                                                189234
 B3652
              Galaxy Building
                                       Sector-125, Noida
                                                                                        build_galaxy.jpg
                                       Sector-56, Gurgaon
                                                                                        build_lucky.jpg
 B5652
              Lucky Homes
Confident Home
                                                                                                                983242
                                                                                        confident.jpg
                                       Flat No-123, Kochi, Kerala
 B7698
                                                                                  34
 BFG64
              Rajdharam Building
                                       Sector-56, Greater Noida
                                                                                        build_raj.jpg
                                                                                                                675453
 rows in set (0.00 sec)
ysql> SAVEPOINT 51;
uery OK, 0 rows affected (0.00 sec)
mysql> INSERT INTO BUILDING VALUES('B5698','Gehlot Home','Flat No-34,Hauz-Khas',13,'ghi.jpg',189234);
Query OK, 1 row affected (0.00 sec)
 (sol) SELECT * FROM BUTLDING
 build_id | b_name
                                     address
                                                                    no_of_rooms | pic_name
                                                                                                          USER_ID |
82324
                                                                                    build1.jpg
             Imperial Building
                                     Lucknow, UP
Rohini Sector-3,Delhi
                                                                               10 I
 82344
              Sangam Buildings
                                                                                    build2.jpg
                                      Sector-45,Faridabad
              LOTUS BUILDING
                                                                                    build_lotus.jpg
                                                                                                           98354
 82754
              ZOLO Building
                                     BTM-Layout,Bangalore
                                                                                    build3.jpg
 83442
              Emerald Home
                                      B-43, Vasant Kunj
                                                                                    build emerals.ipg
83652
85652
85698
              Galaxy Building
                                                                                    build_galaxy.jpg
             Lucky Homes
Gehlot Home
                                     Sector-56, Gurgaon
                                                                                    build_lucky.jpg
                                     Flat No-34, Hauz-Khas
                                                                                    gh1.jpg
confident.jpg
                                    Flat No-123,Kochi,Kerale
Sector-56,Greater Noida
 BEGS4
             Rajdharam Building
                                                                                    build_raj.jpg
                                                                                                           675453
0 rows in set (0.00 sec)
ysql> SAVEPOINT 52;
|wery OK, 0 rows affected (0.00 sec)
ysql> DELETE FROM BUILDING WHERE BUILD_ID='87698';
bery OK, 1 row affected (0.07 sec)
```

| build_id | b_name | address | no_of_rooms | pic_name | USER_ID |
|----------|--------------------|-------------------------|-------------|-------------------|---------|
| 82324 | Imperial Building | Lucknow, UP | 10 | build1.jpg | 65323 |
| 82344 | Sangam Buildings | Rohini Sector-3,Delhi | 3 | build2.jpg | 65323 |
| 82564 | LOTUS BUILDING | Sector-45, Faridabad | 5 | build_lotus.jpg | 65323 |
| 82754 | 20LO Building | BTM-Layout,Bangalore | 5 | build3.jpg | 98354 |
| 83442 | Emerald Home | B-43, Vasant Kunj | 4 | build_emerals.jpg | 189234 |
| 83652 | Galaxy Building | Sector-125, Noida | 6 | build_galaxy.jpg | 392123 |
| 85652 | Lucky Homes | Sector-56, Gurgaon | 4 | build_lucky.jpg | 983242 |
| 85698 | Gehlot Home | Flat No-34, Hauz-Khas | 13 | ghl.jpg | 189234 |
| BF664 | Rajdharam Building | Sector-56,Greater Moida | 2 | build_raj.jpg | 675453 |

mes in set (0.00 sec)

ysql> ROLLBACK WORK TO SAVEPOINT 52; ery OK, 0 rows affected (0.04 sec)

| build_id | b_name | address | no_of_rooms | pic_name | USER_ID |
|----------|--------------------|--------------------------|-------------|-------------------|---------|
| B2324 | Imperial Building | Lucknow, UP | 10 | build1.jpg | 65323 |
| B2344 | Sangam Buildings | Rohini Sector-3,Delhi | 3 | build2.jpg | 65323 |
| B2564 | LOTUS BUILDING | Sector-45,Faridabad | 5 | build_lotus.jpg | 65323 |
| B2754 | ZOLO Building | BTM-Layout,Bangalore | 5 | build3.jpg | 98354 |
| B3442 | Emerald Home | B-43, Vasant Kunj | 4 | build_emerals.jpg | 189234 |
| B3652 | Galaxy Building | Sector-125, Noida | 6 | build_galaxy.jpg | 392123 |
| 35652 | Lucky Homes | Sector-56,Gurgaon | 4 | build_lucky.jpg | 983242 |
| B5698 | Gehlot Home | Flat No-34,Hauz-Khas | 13 | gh1.jpg | 189234 |
| B7698 | Confident Home | Flat No-123,Kochi,Kerala | 34 | confident.jpg | 65323 |
| BFG64 | Rajdharam Building | Sector-56,Greater Noida | 2 | build_raj.jpg | 675453 |

Note → After rolling back, we will able to retrive the data that we have created in backup location before the savepoint location. It means that whatever queries we have executed before the savepoint will be created. Using the rollback we have aborted the state of transaction.

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

Note → I have applied the commit command where it will be used to terminate the state of transaction that I have created in the previous stage. So if I again attempts to rollback to previous save point location, then it throw an error, that this save point doesn't exist. So if we want to create the new transaction, we need to repeat the step that we have done in the previous stage.

```
mysql> ROLLBACK WORK TO SAVEPOINT S1;
ERROR 1305 (42000): SAVEPOINT S1 does not exist
mysql> ROLLBACK WORK TO SAVEPOINT S2;
ERROR 1305 (42000): SAVEPOINT S2 does not exist
```

Lab #9 DBA Practical

```
rysql> SELECT * FROM BUILDING;
 build_id | b_name
                               address
                                                         no_of_rooms | pic_name
                                                                                           USER_ID
                              Lucknow, UP
            Imperial Building
 B2324
                                                                    10 | build1.jpg
 B2344
            Sangam Buildings
                                Rohini Sector-3,Delhi
                                                                    3 | build2.jpg
                                                                    5 | build_lotus.jpg
 B2564
            LOTUS BUILDING
                                Sector-45, Faridabad
 B2754
            ZOLO Building
                                BTM-Layout, Bangalore
                                                                     5 | build3.jpg
                                                                                            98354
                                                                    4 | build_emerals.jpg |
 B3442
            Emerald Home
                                B-43, Vasant Kunj
                                                                                            189234
 B3652
            Galaxy Building
                                Sector-125, Noida
                                                                    6
                                                                        build_galaxy.jpg
                                                                                            392123
            Lucky Homes
                                Sector-56, Gurgaon
 B5652
                                                                    4 | build_lucky.jpg
                                                                                            983242
                                                                    13 | gh1.jpg
            Gehlot Home
                                Flat No-34, Hauz-Khas
                                                                                            189234
 85698
 87698
           Confident Home
                                Flat No-123,Kochi,Kerala
                                                                    34 | confident.jpg
                                                                                            65323
 BFG64
          | Rajdharam Building | Sector-56,Greater Moida |
                                                                    2 | build_raj.jpg
                                                                                            675453
10 rows in set (0.00 sec)
mysql> insert into building values('43903','LonvaT Buildongs','Janakpuri',4,'lo123.jpeg',983242);
Query OK, 1 row affected (0.04 sec)
mysql> COMMIT;
Query OK, 0 rows affected (0.00 sec)
nysql> ROLLBACK;
Query OK, 0 rows affected (0.00 sec)
mysql> SELECT * FROM BUILDING;
 build id | b name
                               address
                                                         no_of_rooms | pic_name
                                                                                           USER ID
            LonvaT Buildongs
                                Janakpuri
 43903
                                                                     4 | lo123.jpeg
                                                                                            983242
 B2324
            Imperial Building
                                Lucknow, UP
                                                                    10 | build1.jpg
                                                                                            65323
 B2344
            Sangam Buildings
                                Rohini Sector-3,Delhi
                                                                    3 | build2.jpg
 B2564
            LOTUS BUILDING
                                Sector-45,Faridabad
                                                                    5 | build_lotus.jpg
            ZOLO Building
 B2754
                                BTM-Layout,Bangalore
                                                                    5 | build3.jpg
                                                                                            98354
 B3442
            Emerald Home
                                B-43, Vasant Kunj
                                                                    4 | build_emerals.jpg |
                                                                                            189234
 B3652
            Galaxy Building
                                Sector-125, Noida
                                                                    6 | build_galaxy.jpg
 B5652
            Lucky Homes
                                Sector-56, Gurgaon
                                                                    4 | build_lucky.jpg
                                                                                            983242
            Gehlot Home
                                Flat No-34, Hauz-Khas
                                                                    13 | gh1.jpg
                                                                                            189234
 B7698
            Confident Home
                                Flat No-123,Kochi,Kerala
                                                                    34 | confident.jpg
 BFG64
          | Rajdharam Building | Sector-56,Greater Noida |
                                                                     2 | build_raj.jpg
                                                                                            675453
1 rows in set (0.00 sec)
```

Note: After inserting the record with then after rollback it will be undoing the changes to previous commit work.

```
ysql> SELECT * FROM BUILDING;
                                                                                               USER_ID
 build_id | b_name
                                  address
                                                             no_of_rooms | pic_name
                                                                            1o123.jpeg
 43983
            LonvaT Buildongs
                                                                                                983242
                                  Janakpuri
            Imperial Building
                                                                           build1.jpg
                                  Lucknow, UP
 B2324
                                                                       10
                                  Rohini Sector-3, Delhi
                                                                           build2.jpg
 B2344
            Sangam Buildings
 82564
            LOTUS BUILDING
                                  Sector-45, Faridabad
                                                                           build_lotus.jpg
                                 BTM-Layout,Bangalore
                                                                           build3.jpg
 82754
            20LO Building
 B3442
            Emerald Home
                                 B-43, Vasant Kunj
                                                                       4
                                                                           build_emerals.jpg
                                                                                                189234
 B3652
            Galaxy Building
                                 Sector-125, Noida
                                                                           build_galaxy.jpg
                                                                                                392123
 B5652
            Lucky Hones
                                 Sector-56, Gurgaon
                                                                           build_lucky.jpg
                                                                                                983242
                                                                           gh1.jpg
confident.jpg
            Gehlot Home
                                 Flat No-34, Hauz-Khas
                                                                       13 |
                                                                                                189234
 85698
 B7698
            Confident Home
                                 Flat No-123, Kochi, Kerala
            Rajdharam Building | Sector-56, Greater Noida
 BFG64
                                                                           build_raj.jpg
                                                                                                675453
ll rows in set (0.00 sec)
nysql> SET AUTOCOMMIT=0;
Query OK, 0 rows affected (0.00 sec)
nysql> insert into building values('44903','Asther Buildings','Janakpuri',4,'lo123.jpeg',983242);
Query OK, 1 row affected (0.01 sec)
mysql> ROLLBACK;
uery OK, 0 rows affected (0.04 sec)
mysql> SELECT * FROM BUILDING;
 build_id | b_name
                                address
                                                            | no_of_rooms | pic_name
                                                                                              USER_ID |
                                                                           lo123.jpeg
 43903
            LonvaT Buildongs
                                  Janakpuri
                                                                                                983242
                                  Lucknow, UP
 B2324
            Imperial Building
                                                                       10 |
                                                                           build1.jpg
                                 Rohini Sector-3,Delhi
                                                                           build2.jpg
 B2344
            Sangam Buildings
            LOTUS BUILDING
                                                                           build_lotus.jpg
 B2564
                                 Sector-45, Faridabad
            ZOLO Building
 B2754
                                 BTM-Layout,Bangalore
                                                                           build3.jpg
 B3442
            Emerald Home
                                  B-43, Vasant Kunj
                                                                           build_emerals.jpg
                                                                                                189234
                                 Sector-125, Noida
 B3652
            Galaxy Building
                                                                           build_galaxy.jpg
 B5652
            Lucky Homes
                                 Sector-56, Gurgaon
                                                                       4 1
                                                                           build_lucky.jpg
                                                                                                983242
 B5698
            Gehlot Home
                                 Flat No-34, Hauz-Khas
                                                                       13
                                                                           gh1.jpg
                                                                                                189234
 B7698
            Confident Home
                                 Flat No-123, Kochi, Kerala
                                                                           confident.jpg
            Rajdharam Building | Sector-56, Greater Noida
                                                                           build_raj.jpg
                                                                                                675453
 BFG64
11 rows in set (0.01 sec)
```

Note → In the above snap, since we are using rollback without mentioning the commit command, then it will be used for the undoing the query because we haven't committed the state of work.

Effect of Auto commit in the transaction (=1)

```
mysql> select @@autocommit;
+------
| @@autocommit |
+------
| 1 |
+-------
1 row in set (0.00 sec)
```

```
mysql> insert into registration values('Alfred Thomas', "Thodopuza, Kerala', "Male',16,8976523412, 'alfred thomas@gmail.com', 'user',894423, 'djsfkddl', '2021-10-09');
Query OK, 1 row affected (0.04 sec)
mysql> insert into registration values('Alok Verma', 'Hisar, Haryana', 'Male',24,8975623412, 'alok@gmail.com', 'user',896532, 'djsfkddl', '2021-10-69');
Query OK, 1 row affected (0.04 sec)
mysel> commit:
Query OK, 0 rows affected (0.00 sec)
nysql> select * from registration;
                                      gender MOB
                                                          AGE
                                                                       email
                                                                                                   u_type | USER_ID | passard
                address
 nane
                                                                                                                                   reg date
 BHUNAN BAM
                 SAROJINI NAGAR, DELHI | Male | 9873423423 |
                                                                    27 | bhuvanban123@email.com
                                                                                                    OMER
                                                                                                               65323 | fdsfsfs
                                                                                                                                    2021-10-02
 RAJANI GUPTA
                                                                   27 | rajani 123@gmail.com
                 SAKET, DELHI
                                       Female | 9332423423 |
                                                                                                               98354 Sdsfdfss
                                                                                                                                    2021-09-22
 ALEN GRACE
                 ROHINI, DELHI
                                              7683434523
                                                                   24 | alengrace1996@gmail.com
                                                                                                    OMER
                                                                                                              189234 | djskffsdlsad | 2021-10-01
                                       Male
 SHANKET SHARMA | B-24, JANAKPURI
                                       Male
                                              8765434532
                                                                   23 | shanket.sharma123@gmail.com |
                                                                                                              342123 jsfsjkifs
                                                                                                                                    2821-09-24
 Sidharth Kumar | Houz Khas, DELHI
                                       Malle
                                              7548734534
                                                                   23 sid_kuma@gmail.com
                                                                                                    OMER
                                                                                                              873432 klsddlhf
                                                                                                                                    2021-09-22
                B-45, SHALIMAR BAGH
 SIJO VARGHESE
                                               8923888342
                                                                    26 sijovarghese@gmail.com
                                                                                                              909652 ssjkkf3sdjf
                                       Male
                                                                                                                                    2021-09-21
                 SECTOR-144, FARDDABAD | Male
                                              8923722342
                                                                                                    USER
 AJEY NAGAR
                                                                   21 | carryminati@gmail.com
                                                                                                              987652 | ssjkkf3sdjf | 2021-09-21
 Alfred Thomas | Thodopuza, Kerala
                                                       16 | 8976523412 | alfred_thomas@gmail.com
                                                                                                              894423 | djsfkddl
                                                                                                                                    2021-10-09
                                       Male
                Hisar, Haryana
                                       Male
                                                       24 | 8975623412 | alok@gmail.com
                                                                                                              896532 | djsfkddl
                                                                                                                                    2821-10-09
 Alok Verma
 rows in set (0.00 sec)
```

Effect of auto commit (=0)

mysql> set autocommit=0; Query OK, 0 rows affected (0.00 sec)

very OK, 1 row affected (0.00 sec) ysql> insert into registration values('Priya Khanna','Makherji Nagar, Belhi','Female',27,8975622331,'priya_khanna@gmail.com','camer',82335,'djsfkddi','2021-10-89'); wery OK, 1 row affected (0.00 sec) ysql> ROLLBACK; ery DK, 8 nows affected (8.84 sec) ysql> select " from registration; address email. u_type | USER_ID | passwrd SARCODEL NAGAR, DELHE | bhuvanbam123@gmail.com rujani_123@gmail.com alengrace3990@gmail.com SAKET, DELHI ROHINE, DELHI Female Male 98354 189234 2821-89-22 2821-18-81 BAJANE GUPTA 9332423423 Schafdfan djskffsdlsad ALEN GRACE DATER SHAKET SHARM. 8-24, SWAMPURI Hauz Khas, DELHI Nabe Nabe 8765434532 7548734534 shanket.sharma121@gmail.com jsfsjkdfs kladdlhf 2821-89-24 2821-89-22 sid_kuma@gmail.com Sidharth Kumar 8-45, SHALDMA BAGH SECTOR-144, FARIDABAD Male Male 8923888342 8923722342 sijovanghese@gmail.com carryminati@gmail.com USER USER 909652 987652 2021-09-21 2021-09-21 AJEY NAGAR ssikkf3sd9f Thodoguza, Kerala Male Male 8976523412 | alfred_thomas@ 8975623412 | alok@gmail.com Miser, Heryana 896532 dfnfkddl 2821-10-69 Alok Verma rows in set (0.00 sec)

Using Read only Command

```
mysql> set transaction read only;
Query OK, 0 rows affected (0.00 sec)

mysql> select @@autocommit;

| @@autocommit |

| 1 |

| row in set (0.00 sec)

mysql> insert into feedback values(2354, 'Ashu', '2021-10-09', 'Very Nice Service!', 2375);

ERROR 1792 (25006): Cannot execute statement in a READ ONLY transaction.
```

Note → Here if we invoke the set the transaction with read only privileges, then we can have the provision to view the data contents in the table. When I attempt to insert the data in the table, you can see the violation of read only is supported where we can use the select command to view the data. Other DML commands like insert, update, delete will not work.