

Database with the table as well as virtual table or view

```
mysql> use apartment_managedb;
Database changed
mysql> show tables;

+-----+
| Tables_in_apartment_managedb |
+-----+
| admin                        |
| balance                     |
| building                    |
| complaint                   |
| customer                    |
| customer_detail              |
| feedback                    |
| register                    |
| registration                 |
| reset_passw                  |
| room                         |
| room_build                   |
+-----+
12 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

```
mysql> SELECT * FROM BUILDING;
```

build_id	b_name	address	no_of_rooms	pic_name	USER_ID
B2324	Imperial Building	Lucknow, UP	5	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
B5652	Lucky Homes	Sector-56, Gurgaon	4	build_lucky.jpg	983242
BFG64	Rajdharam Building	Sector-56, Greater Noida	2	build_raj.jpg	675453

```
8 rows in set (0.07 sec)
```

```
mysql> UPDATE BUILDING SET NO_OF_ROOMS=10 WHERE BUILD_ID='B2324';
ERROR 1054 (42S22): Unknown column 'BUILD_ID' in 'where clause'
mysql> UPDATE BUILDING SET NO_OF_ROOMS=10 WHERE BUILD_ID='B2324';
Query OK, 1 row affected (0.04 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

```
mysql> INSERT INTO BUILDING VALUES('B7698', 'Confident Home', 'Flat No-123, Kochi, Kerala', 34, 'confident.jpg', 65323);
Query OK, 1 row affected (0.04 sec)
```

```
mysql> SELECT * FROM BUILDING;
```

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
B5652	Lucky Homes	Sector-56, Gurgaon	4	build_lucky.jpg	983242
B7698	Confident Home	Flat No-123, Kochi, Kerala	34	confident.jpg	65323
BFG64	Rajdharam Building	Sector-56, Greater Noida	2	build_raj.jpg	675453

```
9 rows in set (0.00 sec)
```

```
mysql> SAVEPOINT S1;
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> INSERT INTO BUILDING VALUES('B5698', 'Gehlot Home', 'Flat No-34, Hauz-Khas', 13, 'gh1.jpg', 189234);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> SELECT * FROM BUILDING;
```

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
B5652	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

```
10 rows in set (0.00 sec)
```

```
mysql> SAVEPOINT S2;
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> DELETE FROM BUILDING WHERE BUILD_ID='B7698';
Query OK, 1 row affected (0.07 sec)
```

```
mysql> SELECT * FROM BUILDING;
```

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
B5652	Lucky Homes	Sector-56, Gurgaon	4	build_lucky.jpg	983242
B5698	Gehlot Home	Flat No-34, Hauz-Khas	13	gh1.jpg	189234
BFG64	Rajdharam Building	Sector-56, Greater Noida	2	build_raj.jpg	675453

```
9 rows in set (0.00 sec)
```

```
mysql> ROLLBACK WORK TO SAVEPOINT S2;
Query OK, 0 rows affected (0.04 sec)
```

```
mysql> SELECT * FROM BUILDING;
```

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
B5652	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

10 rows in set (0.00 sec)

Note → After rolling back, we will be able to retrieve 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
```

```
mysql> SELECT * FROM BUILDING;
```

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	ZOLD 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
B5652	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

```
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)

mysql> 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
43903	LonvaT Buildongs	Janakpuri	4	lo123.jpeg	983242
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	ZOLD 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
B5652	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

```
11 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.

```
mysql> SELECT * FROM BUILDING;
```

build_id	b_name	address	no_of_rooms	pic_name	USER_ID
43903	LomvaT Buildongs	Janakpuri	4	lo123.jpeg	983242
02324	Imperial Building	Lucknow, UP	10	build1.jpg	65323
02344	Sangam Buildings	Rohini Sector-3, Delhi	3	build2.jpg	65323
02564	LOTUS BUILDING	Sector-45, Faridabad	5	build_lotus.jpg	65323
02754	ZOLO Building	BTM-Layout, Bangalore	5	build3.jpg	98354
03442	Emerald Home	B-43, Vasant Kunj	4	build_emerals.jpg	189234
03652	Galaxy Building	Sector-125, Noida	6	build_galaxy.jpg	392123
05652	Lucky Homes	Sector-56, Gurgaon	4	build_lucky.jpg	983242
05698	Gehlot Home	Flat No-34, Hauz-Khas	13	gh1.jpg	189234
07698	Confident Home	Flat No-123, Kochi, Kerala	34	confident.jpg	65323
0FG64	Rajdharam Building	Sector-56, Greater Noida	2	build_raj.jpg	675453

```
11 rows in set (0.00 sec)

mysql> SET AUTOCOMMIT=0;
Query OK, 0 rows affected (0.00 sec)

mysql> insert into building values('44903','Aster Buildings','Janakpuri',4,'lo123.jpeg',983242);
Query OK, 1 row affected (0.01 sec)

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

mysql> SELECT * FROM BUILDING;
```

build_id	b_name	address	no_of_rooms	pic_name	USER_ID
43903	LomvaT Buildongs	Janakpuri	4	lo123.jpeg	983242
02324	Imperial Building	Lucknow, UP	10	build1.jpg	65323
02344	Sangam Buildings	Rohini Sector-3, Delhi	3	build2.jpg	65323
02564	LOTUS BUILDING	Sector-45, Faridabad	5	build_lotus.jpg	65323
02754	ZOLO Building	BTM-Layout, Bangalore	5	build3.jpg	98354
03442	Emerald Home	B-43, Vasant Kunj	4	build_emerals.jpg	189234
03652	Galaxy Building	Sector-125, Noida	6	build_galaxy.jpg	392123
05652	Lucky Homes	Sector-56, Gurgaon	4	build_lucky.jpg	983242
05698	Gehlot Home	Flat No-34, Hauz-Khas	13	gh1.jpg	189234
07698	Confident Home	Flat No-123, Kochi, Kerala	34	confident.jpg	65323
0FG64	Rajdharam Building	Sector-56, Greater Noida	2	build_raj.jpg	675453

```
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','2021-10-09');
Query OK, 1 row affected (0.04 sec)

mysql> commit;
Query OK, 0 rows affected (0.00 sec)

mysql> select * from registration;
```

name	address	gender	DOB	AGE	email	u_type	USER_ID	password	reg_date
BHUVAN BAI	SARODINI NAGAR, DELHI	Male	9873423423	27	bhuvanbai23@gmail.com	OWNER	65323	fdsfsfs	2021-10-02
RAJANI GUPTA	SARET, DELHI	Female	9332423423	27	rajani_123@gmail.com	USER	98354	Sdsfdss	2021-09-22
ALEN GRACE	ROHINI, DELHI	Male	7683434523	24	alengrancel99@gmail.com	OWNER	189234	djskffsdlsad	2021-10-01
SHANKET SHARMA	B-24, JANAKPURI	Male	8765434532	23	shanket.sharma123@gmail.com	USER	342123	jsfsjkdfs	2021-09-24
Sidharth Kumar	Hauz Khas, DELHI	Male	7548734534	23	sid_kuma@gmail.com	OWNER	873432	klsd41hf	2021-09-22
SIJO VARGHESE	B-45, SHAHIMAR BAGH	Male	8923889342	26	sijovarghese@gmail.com	USER	909652	ssjkkf3sdjf	2021-09-21
AJEY NAGAR	SECTOR-144, FARIDABAD	Male	8923722342	21	carryminati@gmail.com	USER	987652	ssjkkf3sdjf	2021-09-21
Alfred Thomas	Thodopuza, Kerala	Male	16	8976523412	alfred_thomas@gmail.com	user	894423	djsfkddl	2021-10-09
Alok Verma	Hisar, Haryana	Male	24	8975623412	alok@gmail.com	user	896532	djsfkddl	2021-10-09

```
9 rows in set (0.00 sec)
```

Effect of auto commit (=0)

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

mysql> insert into registration values('Shantanu','Gurgaon, Haryana','Male',21,897544312,'shantanu@gmail.com','owner',89811,'djsfkddl','2021-10-09');
Query OK, 1 row affected (0.00 sec)

mysql> insert into registration values('Priya Khanna','Pukherji Nagar, Delhi','Female',27,8975622331,'priya_khanna@gmail.com','owner',82335,'djsfkddl','2021-10-09');
Query OK, 1 row affected (0.00 sec)

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

mysql> select * from registration;
```

name	address	gender	DOB	AGE	email	u_type	USER_ID	password	reg_date
BHUVAN BAI	SARODINI NAGAR, DELHI	Male	9873423423	27	bhuvanbai23@gmail.com	OWNER	65323	fdsfsfs	2021-10-02
RAJANI GUPTA	SARET, DELHI	Female	9332423423	27	rajani_123@gmail.com	USER	98354	Sdsfdss	2021-09-22
ALEN GRACE	ROHINI, DELHI	Male	7683434523	24	alengrancel99@gmail.com	OWNER	189234	djskffsdlsad	2021-10-01
SHANKET SHARMA	B-24, JANAKPURI	Male	8765434532	23	shanket.sharma123@gmail.com	USER	342123	jsfsjkdfs	2021-09-24
Sidharth Kumar	Hauz Khas, DELHI	Male	7548734534	23	sid_kuma@gmail.com	OWNER	873432	klsd41hf	2021-09-22
SIJO VARGHESE	B-45, SHAHIMAR BAGH	Male	8923889342	26	sijovarghese@gmail.com	USER	909652	ssjkkf3sdjf	2021-09-21
AJEY NAGAR	SECTOR-144, FARIDABAD	Male	8923722342	21	carryminati@gmail.com	USER	987652	ssjkkf3sdjf	2021-09-21
Alfred Thomas	Thodopuza, Kerala	Male	16	8976523412	alfred_thomas@gmail.com	user	894423	djsfkddl	2021-10-09
Alok Verma	Hisar, Haryana	Male	24	8975623412	alok@gmail.com	user	896532	djsfkddl	2021-10-09

```
9 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 |
+-----+
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.