

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

```
mysql> create user 'ajaykumar'@'localhost';
Query OK, 0 rows affected (0.11 sec)
```

```
mysql> show grants for 'ajaykumar'@'localhost';
+-----+
| Grants for ajaykumar@localhost |
+-----+
| GRANT USAGE ON *.* TO `ajaykumar`@`localhost` |
+-----+
1 row in set (0.01 sec)
```

```
mysql> grant select on *.* to 'ajaykumar'@'localhost';
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> show grants for 'ajaykumar'@'localhost';
+-----+
| Grants for ajaykumar@localhost |
+-----+
| GRANT SELECT ON *.* TO `ajaykumar`@`localhost` |
+-----+
1 row in set (0.00 sec)
```

```
mysql> show databases;
+-----+
| Database |
+-----+
| ajaykumar |
| bianca |
| information_schema |
| mysql |
| performance_schema |
| studyhive |
| sys |
+-----+
7 rows in set (0.03 sec)
```

```
mysql> show tables;
ERROR 1046 (3D000): No database selected
mysql> use ajaykumar;
Database changed
mysql> show tables;
```

```
+-----+
| Tables_in_ajaykumar |
+-----+
| customers |
| department |
```

```

| emp_audit          |
| employee           |
| orders             |
| sal_history        |
| view_customer_order |
| view_order         |
+-----+
8 rows in set (0.01 sec)

```

```

mysql> grant insert on ajaykumar.* to 'ajaykumar'@'localhost';
Query OK, 0 rows affected (0.00 sec)

```

```

mysql> grant update on ajaykumar.orders to 'ajaykumar'@'localhost';
Query OK, 0 rows affected (0.01 sec)

```

```

mysql> show grants for 'ajaykumar'@'localhost';
+-----+
| Grants for ajaykumar@localhost |
+-----+
| GRANT SELECT ON *.* TO `ajaykumar`@`localhost` |
| GRANT INSERT ON `ajaykumar`.* TO `ajaykumar`@`localhost` |
| GRANT UPDATE ON `ajaykumar`.`orders` TO `ajaykumar`@`localhost` |
+-----+
3 rows in set (0.00 sec)

```

```

mysql> desc employee
-> ;

```

```

+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| Eno   | int           | NO   | PRI | NULL    |       |
| fname | varchar(20)   | NO   |     | NULL    |       |
| lname | varchar(20)   | NO   |     | NULL    |       |
| DOB   | date          | NO   |     | NULL    |       |
| salary | int           | NO   |     | NULL    |       |
| dnum  | int           | YES  | MUL | NULL    |       |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.02 sec)

```

```

mysql> grant update(Eno) on ajaykumar.employee to 'ajaykumar'@'localhost';
Query OK, 0 rows affected (0.03 sec)

```

```

mysql> show grants for 'ajaykumar'@'localhost';
+-----+
| Grants for ajaykumar@localhost |
+-----+
| GRANT SELECT ON *.* TO `ajaykumar`@`localhost` |
| GRANT INSERT ON `ajaykumar`.* TO `ajaykumar`@`localhost` |
| GRANT UPDATE (`Eno`) ON `ajaykumar`.`employee` TO `ajaykumar`@`localhost` |
| GRANT UPDATE ON `ajaykumar`.`orders` TO `ajaykumar`@`localhost` |
+-----+
4 rows in set (0.00 sec)

```

```

mysql> system mysql -u ajaykumar -p
Enter password:

```

Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 11
Server version: 8.1.0 MySQL Community Server - GPL

mysql> select user();

```
+-----+
| user() |
+-----+
| ajaykumar@localhost |
+-----+
1 row in set (0.00 sec)
```

mysql> use ajaykumar;

Database changed

mysql> select * from employee;

```
+-----+-----+-----+-----+-----+-----+
| Eno | fname | lname | DOB | salary | dnum |
+-----+-----+-----+-----+-----+-----+
| 2 | Aaron | Vaz | 2002-04-04 | 109999 | 1 |
| 3 | Binaka | Noronha | 2005-01-26 | 55555 | 1 |
| 4 | Chris | Shukla | 2004-12-31 | 44444 | 2 |
| 5 | Sobin | Sabu | 2004-12-24 | 33333 | 3 |
| 6 | Ajaykumar | Nadar | 2003-08-20 | 44444 | 1 |
| 7 | Kurti | Bhave | 2005-01-26 | 55555 | 1 |
| 8 | Viral | Soni | 2004-12-31 | 12345 | 4 |
| 9 | Ansh | Shetty | 2002-12-24 | 12345 | 4 |
| 10 | Joseph | Kumari | 2003-10-20 | 12345 | 2 |
| 11 | Vaidehi | Golegoa | 2004-01-23 | 12345 | 4 |
+-----+-----+-----+-----+-----+-----+
10 rows in set (0.02 sec)
```

mysql> select * from orders;

```
+-----+-----+-----+
| order_id | amount | customer_id |
+-----+-----+-----+
| 1 | 1233 | 10 |
| 2 | 67212 | 2 |
| 3 | 3423 | 4 |
| 4 | 5262 | 8 |
| 5 | 7838 | 5 |
| 6 | 1233 | 10 |
| 7 | 67212 | 2 |
| 8 | 3423 | 4 |
| 9 | 5262 | 8 |
| 10 | 7838 | 5 |
+-----+-----+-----+
10 rows in set (0.05 sec)
```

mysql> show grants for 'ajaykumar'@'localhost';

```
+-----+
| Grants for ajaykumar@localhost |
+-----+
| GRANT SELECT ON *.* TO `ajaykumar`@`localhost` |
| GRANT INSERT ON `ajaykumar`.* TO `ajaykumar`@`localhost` |
| GRANT UPDATE (`Eno`) ON `ajaykumar`.`employee` TO `ajaykumar`@`localhost` |
+-----+
```

```
| GRANT UPDATE ON `ajaykumar`.`orders` TO `ajaykumar`@`localhost` |
+-----+
4 rows in set (0.04 sec)
```

```
mysql> insert into employee value (1, "Subho", "Modak", "2004-12-31", 12344, 1);
Query OK, 1 row affected (0.03 sec)
```

```
mysql> select * from employee;
+-----+-----+-----+-----+-----+-----+
| Eno | fname | lname | DOB | salary | dnum |
+-----+-----+-----+-----+-----+-----+
| 1 | Subho | Modak | 2004-12-31 | 12344 | 1 |
| 2 | Aaron | Vaz | 2002-04-04 | 109999 | 1 |
| 3 | Binaka | Noronha | 2005-01-26 | 55555 | 1 |
| 4 | Chris | Shukla | 2004-12-31 | 44444 | 2 |
| 5 | Sobin | Sabu | 2004-12-24 | 33333 | 3 |
| 6 | Ajaykumar | Nadar | 2003-08-20 | 44444 | 1 |
| 7 | Kurti | Bhave | 2005-01-26 | 55555 | 1 |
| 8 | Viral | Soni | 2004-12-31 | 12345 | 4 |
| 9 | Ansh | Shetty | 2002-12-24 | 12345 | 4 |
| 10 | Joseph | Kumari | 2003-10-20 | 12345 | 2 |
| 11 | Vaidehi | Golegoa | 2004-01-23 | 12345 | 4 |
+-----+-----+-----+-----+-----+-----+
11 rows in set (0.00 sec)
```

```
mysql> update orders set amount=55555 where order_id=2;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

```
mysql> revoke update(Eno) on ajaykumar.employee from 'ajaykumar'@'localhost';
ERROR 1142 (42000): GRANT command denied to user 'ajaykumar'@'localhost' for table 'employee'
```

```
mysql> system mysql -u root -p
Enter password: *****
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 12
Server version: 8.1.0 MySQL Community Server - GPL
```

```
mysql> revoke update(Eno) on ajaykumar.employee from 'ajaykumar'@'localhost';
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> show grants for 'ajaykumar'@'localhost';
+-----+-----+-----+-----+-----+-----+
| Grants for ajaykumar@localhost |
+-----+-----+-----+-----+-----+-----+
| GRANT SELECT ON *.* TO `ajaykumar`@`localhost` |
| GRANT INSERT ON `ajaykumar`.* TO `ajaykumar`@`localhost` |
| GRANT UPDATE ON `ajaykumar`.`orders` TO `ajaykumar`@`localhost` |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

```
mysql> revoke insert on ajaykumar.* from 'ajaykumar'@'localhost';
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> show grants for 'ajaykumar'@'localhost';
```

```

+-----+
| Grants for ajaykumar@localhost |
+-----+
| GRANT SELECT ON *.* TO `ajaykumar`@`localhost` |
| GRANT UPDATE ON `ajaykumar`.`orders` TO `ajaykumar`@`localhost` |
+-----+
2 rows in set (0.00 sec)

```

```

mysql> grant all privileges on *.* to 'ajaykumar'@'localhost' with grant option;
Query OK, 0 rows affected (0.01 sec)

```

```

mysql> show grants for 'ajaykumar'@'localhost';
+-----+
| Grants for ajaykumar@localhost |
|
+-----+
| GRANT SELECT, INSERT, UPDATE, DELETE, CREATE, DROP, RELOAD, SHUTDOWN, PROCESS,
FILE, REFERENCES, INDEX, ALTER, SHOW DATABASES, SUPER, CREATE TEMPORARY TABLES,
LOCK TABLES, EXECUTE, REPLICATION SLAVE, REPLICATION CLIENT, CREATE VIEW, SHOW
VIEW, CREATE ROUTINE, ALTER ROUTINE, CREATE USER, EVENT, TRIGGER, CREATE
TABLESPACE, CREATE ROLE, DROP ROLE ON *.* TO `ajaykumar`@`localhost` WITH GRANT
OPTION
|
| GRANT
APPLICATION_PASSWORD_ADMIN,AUDIT_ABORT_EXEMPT,AUDIT_ADMIN,AUTHENTICATION_POLICY_AD
MIN,BACKUP_ADMIN,BINLOG_ADMIN,BINLOG_ENCRYPTION_ADMIN,CLONE_ADMIN,CONNECTION_ADMIN
,ENCRYPTION_KEY_ADMIN,FIREWALL_EXEMPT,FLUSH_OPTIMIZER_COSTS,FLUSH_STATUS,FLUSH_TAB
LES,FLUSH_USER_RESOURCES,GROUP_REPLICATION_ADMIN,GROUP_REPLICATION_STREAM,INNODB_R
EDO_LOG_ARCHIVE,INNODB_REDO_LOG_ENABLE,PASSWORDLESS_USER_ADMIN,PERSIST_RO_VARIABLE
S_ADMIN,REPLICATION_APPLIER,REPLICATION_SLAVE_ADMIN,RESOURCE_GROUP_ADMIN,RESOURCE_
GROUP_USER,ROLE_ADMIN,SENSITIVE_VARIABLES_OBSERVER,SERVICE_CONNECTION_ADMIN,SESSIO
N_VARIABLES_ADMIN,SET_USER_ID,SHOW_ROUTINE,SYSTEM_USER,SYSTEM_VARIABLES_ADMIN,TABL
E_ENCRYPTION_ADMIN,TELEMETRY_LOG_ADMIN,XA_RECOVER_ADMIN ON *.* TO
`ajaykumar`@`localhost` WITH GRANT OPTION |
| GRANT UPDATE ON `ajaykumar`.`orders` TO `ajaykumar`@`localhost`
|
+-----+
3 rows in set (0.00 sec)

```

```

mysql> alter user 'ajaykumar'@'localhost' identified by 'root' account lock;
Query OK, 0 rows affected (0.06 sec)

```

```

mysql> system mysql -u ajaykumar -p
Enter password: ****
ERROR 3118 (HY000): Access denied for user 'ajaykumar'@'localhost'. Account is
locked.
mysql> system mysql -u ajaykumar -p
Enter password:
ERROR 1045 (28000): Access denied for user 'ajaykumar'@'localhost' (using
password: NO)
mysql> system mysql -u ajaykumar -p
Enter password: ****
ERROR 3118 (HY000): Access denied for user 'ajaykumar'@'localhost'. Account is
locked.
mysql> alter user 'ajaykumar'@'localhost' identified by 'root' account unlock;

```

Query OK, 0 rows affected (0.05 sec)

mysql> system mysql -u ajaykumar -p

Enter password: ****

Welcome to the MySQL monitor. Commands end with ; or \g.

Your MySQL connection id is 16

Server version: 8.1.0 MySQL Community Server - GPL

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

mysql> system mkdir

The syntax of the command is incorrect.

mysql> system mkdir "ajay"

Access is denied.

mysql> swt autocommit=0;

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 'swt autocommit=0' at line 1

mysql> use ajaykumar

Database changed

mysql> swt autocommit=0;

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 'swt autocommit=0' at line 1

mysql> set autocommit=0;

Query OK, 0 rows affected (0.04 sec)

mysql> desc employee;

Field	Type	Null	Key	Default	Extra
Eno	int	NO	PRI	NULL	
fname	varchar(20)	NO		NULL	
lname	varchar(20)	NO		NULL	
DOB	date	NO		NULL	
salary	int	NO		NULL	
dnum	int	YES	MUL	NULL	

6 rows in set (0.05 sec)

mysql> insert into employee value (32, 'Vanilla', 'Strawberry', "2003-03-03", 12323, 1);

Query OK, 1 row affected (0.04 sec)

mysql> savepoint insertion;

Query OK, 0 rows affected (0.04 sec)

mysql> select * from employee;

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

Eno	fname	lname	DOB	salary	dnum
1	Subho	Modak	2004-12-31	12344	1
2	Aaron	Vaz	2002-04-04	109999	1
3	Binaka	Noronha	2005-01-26	55555	1
4	Chris	Shukla	2004-12-31	44444	2
5	Sobin	Sabu	2004-12-24	33333	3
6	Ajaykumar	Nadar	2003-08-20	44444	1
7	Kurti	Bhave	2005-01-26	55555	1
8	Viral	Soni	2004-12-31	12345	4
9	Ansh	Shetty	2002-12-24	12345	4
10	Joseph	Kumari	2003-10-20	12345	2
11	Vaidehi	Golegoa	2004-01-23	12345	4
32	Vanilla	Strawberry	2003-03-03	12323	1

12 rows in set (0.00 sec)

```
mysql> insert into employee value (33, 'Mango', 'Orange', "2003-03-03", 12323, 1);
Query OK, 1 row affected (0.04 sec)
```

```
mysql> select * from employee;
```

Eno	fname	lname	DOB	salary	dnum
1	Subho	Modak	2004-12-31	12344	1
2	Aaron	Vaz	2002-04-04	109999	1
3	Binaka	Noronha	2005-01-26	55555	1
4	Chris	Shukla	2004-12-31	44444	2
5	Sobin	Sabu	2004-12-24	33333	3
6	Ajaykumar	Nadar	2003-08-20	44444	1
7	Kurti	Bhave	2005-01-26	55555	1
8	Viral	Soni	2004-12-31	12345	4
9	Ansh	Shetty	2002-12-24	12345	4
10	Joseph	Kumari	2003-10-20	12345	2
11	Vaidehi	Golegoa	2004-01-23	12345	4
32	Vanilla	Strawberry	2003-03-03	12323	1
33	Mango	Orange	2003-03-03	12323	1

13 rows in set (0.00 sec)

```
mysql> rollback to insertion;
Query OK, 0 rows affected (0.04 sec)
```

```
mysql> select * from employee;
```

Eno	fname	lname	DOB	salary	dnum
1	Subho	Modak	2004-12-31	12344	1
2	Aaron	Vaz	2002-04-04	109999	1
3	Binaka	Noronha	2005-01-26	55555	1
4	Chris	Shukla	2004-12-31	44444	2
5	Sobin	Sabu	2004-12-24	33333	3
6	Ajaykumar	Nadar	2003-08-20	44444	1
7	Kurti	Bhave	2005-01-26	55555	1
8	Viral	Soni	2004-12-31	12345	4

9	Ansh	Shetty	2002-12-24	12345	4
10	Joseph	Kumari	2003-10-20	12345	2
11	Vaidehi	Golegoa	2004-01-23	12345	4
32	Vanilla	Strawberry	2003-03-03	12323	1

12 rows in set (0.00 sec)

mysql>

mysql> update employee set fname='Bianka' where fname="Binaca";

Query OK, 0 rows affected (0.01 sec)

Rows matched: 0 Changed: 0 Warnings: 0

mysql> rollback updated;

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 'updated' at line 1

mysql> savepoint updated;

Query OK, 0 rows affected (0.00 sec)

mysql> update employee set fname="Biyanca" where fname="Bianka";

Query OK, 0 rows affected (0.00 sec)

Rows matched: 0 Changed: 0 Warnings: 0

mysql> select * from employee;

Eno	fname	lname	DOB	salary	dnum
1	Subho	Modak	2004-12-31	12344	1
2	Aaron	Vaz	2002-04-04	109999	1
3	Binaka	Noronha	2005-01-26	55555	1
4	Chris	Shukla	2004-12-31	44444	2
5	Sobin	Sabu	2004-12-24	33333	3
6	Ajaykumar	Nadar	2003-08-20	44444	1
7	Kurti	Bhave	2005-01-26	55555	1
8	Viral	Soni	2004-12-31	12345	4
9	Ansh	Shetty	2002-12-24	12345	4
10	Joseph	Kumari	2003-10-20	12345	2
11	Vaidehi	Golegoa	2004-01-23	12345	4
32	Vanilla	Strawberry	2003-03-03	12323	1

12 rows in set (0.00 sec)

mysql> rollback updated;

Query OK, 1 rows affected (0.00 sec)

mysql> commit;

Query OK, 0 rows affected (0.04 sec)

mysql>