

```
mysql> show databases;
```

Database
information_schema
mydb
mysql
nit
performance_schema
sakila
sys
world

```
8 rows in set (0.01 sec)
```

```
mysql> use nit;
```

```
Database changed
```

```
mysql> select * from customers;
```

ID	NAME	AGE	ADDRESS	SALARY
1	Ramesh	32	Ahmedabad	2000.00
2	Khilan	25	Delhi	1500.00
3	kaushik	23	Kota	2000.00
4	Chaitali	25	Mumbai	6500.00
5	Hardik	27	Bhopal	8500.00
6	Komal	22	MP	4500.00
7	Muffy	24	Indore	10000.00

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

```
mysql> select * from orders;
```

```
Empty set (0.00 sec)
```

```
mysql> create table orders(
```

```
-> ;
```

```
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 '' at line 1
```

```
mysql> create table orders(
```

```
-> ID int NOT NULL,
```

```
-> DATE datetime,
```

```
-> CUSTOMER_ID int references customers(id),
```

```
-> AMOUNT double,
```

```
-> primary key(ID)
```

```
-> );
```

```
ERROR 1050 (42S01): Table 'orders' already exists
```

```
mysql> insert into orders
```

```
-> values (101, '2009-11-20 00:00:00', 2, 1560),
```

```
-> (102, '2009-10-08 00:00:00', 3, 3000),
```

```
-> (103, '2008-05-20 00:00:00', 4, 2060),
```

```
-> (100, '2009-10-08 00:00:00', 3, 1500);
```

```
Query OK, 4 rows affected (0.03 sec)
```

```
Records: 4 Duplicates: 0 Warnings: 0
```

```
mysql> select * from orders;
```

ID	DATE	CUSTOMER_ID	AMOUNT
100	2009-10-08 00:00:00	3	1500
101	2009-11-20 00:00:00	2	1560
102	2009-10-08 00:00:00	3	3000
103	2008-05-20 00:00:00	4	2060

4 rows in set (0.00 sec)

```
mysql> select * from customers;
```

ID	NAME	AGE	ADDRESS	SALARY
1	Ramesh	32	Ahmedabad	2000.00
2	Khilan	25	Delhi	1500.00
3	kaushik	23	Kota	2000.00
4	Chaitali	25	Mumbai	6500.00
5	Hardik	27	Bhopal	8500.00
6	Komal	22	MP	4500.00
7	Muffy	24	Indore	10000.00

7 rows in set (0.00 sec)

```
mysql> SELECT ID, NAME, AGE, AMOUNT
-> FROM CUSTOMERS, ORDERS
-> WHERE CUSTOMERS.ID = ORDERS.CUSTOMER_ID;
ERROR 1052 (23000): Column 'ID' in field list is ambiguous
mysql> alter table orders
-> rename column id to OID;
Query OK, 0 rows affected (0.06 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> select * from orders;
```

OID	DATE	CUSTOMER_ID	AMOUNT
100	2009-10-08 00:00:00	3	1500
101	2009-11-20 00:00:00	2	1560
102	2009-10-08 00:00:00	3	3000
103	2008-05-20 00:00:00	4	2060

4 rows in set (0.00 sec)

```
mysql> SELECT ID, NAME, AGE, AMOUNT
-> FROM CUSTOMERS, ORDERS
-> WHERE CUSTOMERS.ID = ORDERS.CUSTOMER_ID;
```

ID	NAME	AGE	AMOUNT
3	kaushik	23	1500
2	Khilan	25	1560
3	kaushik	23	3000
4	Chaitali	25	2060

4 rows in set (0.00 sec)

```
mysql> select id, name, amount, date
-> from customers
-> left join orders
-> on customers.id = orders.customer_id;
```

id	name	amount	date
1	Ramesh	NULL	NULL
2	Khilan	1560	2009-11-20 00:00:00
3	kaushik	3000	2009-10-08 00:00:00
3	kaushik	1500	2009-10-08 00:00:00
4	Chaitali	2060	2008-05-20 00:00:00
5	Hardik	NULL	NULL
6	Komal	NULL	NULL
7	Muffy	NULL	NULL

```
+---+-----+-----+-----+
8 rows in set (0.00 sec)
```

```
mysql> select id, name, amount, date
-> from customers
-> right join orders
-> on customers.id = orders.customer_id;
```

```
+---+-----+-----+-----+
| id | name      | amount | date                |
+---+-----+-----+-----+
| 3  | kaushik   | 1500   | 2009-10-08 00:00:00 |
| 2  | Khilan    | 1560   | 2009-11-20 00:00:00 |
| 3  | kaushik   | 3000   | 2009-10-08 00:00:00 |
| 4  | Chaitali  | 2060   | 2008-05-20 00:00:00 |
+---+-----+-----+-----+
4 rows in set (0.00 sec)
```

```
mysql> SELECT ID, NAME, AMOUNT, DATE
-> FROM CUSTOMERS
-> FULL JOIN ORDERS
-> ON CUSTOMERS.ID = ORDERS.CUSTOMER_ID;
ERROR 1054 (42S22): Unknown column 'CUSTOMERS.ID' in 'on clause'
mysql> select * from customers;
```

```
+---+-----+-----+-----+
| ID | NAME      | AGE | ADDRESS      | SALARY |
+---+-----+-----+-----+
| 1  | Ramesh    | 32  | Ahmedabad    | 2000.00 |
| 2  | Khilan    | 25  | Delhi        | 1500.00 |
| 3  | kaushik   | 23  | Kota         | 2000.00 |
| 4  | Chaitali  | 25  | Mumbai       | 6500.00 |
| 5  | Hardik    | 27  | Bhopal       | 8500.00 |
| 6  | Komal     | 22  | MP           | 4500.00 |
| 7  | Muffy     | 24  | Indore       | 10000.00 |
+---+-----+-----+-----+
7 rows in set (0.00 sec)
```

```
mysql> select * from orders;
```

```
+---+-----+-----+-----+
| OID | DATE                | CUSTOMER_ID | AMOUNT |
+---+-----+-----+-----+
| 100 | 2009-10-08 00:00:00 | 3           | 1500   |
| 101 | 2009-11-20 00:00:00 | 2           | 1560   |
| 102 | 2009-10-08 00:00:00 | 3           | 3000   |
| 103 | 2008-05-20 00:00:00 | 4           | 2060   |
+---+-----+-----+-----+
4 rows in set (0.00 sec)
```

```
mysql> select id, name, amount, date
-> from customers
-> full join orders
-> on customers.id = orders.customer_id;
ERROR 1054 (42S22): Unknown column 'customers.id' in 'on clause'
mysql> SELECT ID, NAME, AMOUNT, DATE
```

```
-> FROM CUSTOMERS
-> LEFT JOIN ORDERS
-> ON CUSTOMERS.ID = ORDERS.CUSTOMER_ID
-> UNION ALL
-> SELECT ID, NAME, AMOUNT, DATE
-> FROM CUSTOMERS
-> RIGHT JOIN ORDERS
-> ON CUSTOMERS.ID = ORDERS.CUSTOMER_ID;
+---+-----+-----+-----+
| ID | NAME      | AMOUNT | DATE                |
+---+-----+-----+-----+
```

1	Ramesh	NULL	NULL
2	Khilan	1560	2009-11-20 00:00:00
3	kaushik	3000	2009-10-08 00:00:00
3	kaushik	1500	2009-10-08 00:00:00
4	Chaitali	2060	2008-05-20 00:00:00
5	Hardik	NULL	NULL
6	Komal	NULL	NULL
7	Muffy	NULL	NULL
3	kaushik	1500	2009-10-08 00:00:00
2	Khilan	1560	2009-11-20 00:00:00
3	kaushik	3000	2009-10-08 00:00:00
4	Chaitali	2060	2008-05-20 00:00:00

12 rows in set (0.00 sec)

```
mysql> SELECT a.ID, b.NAME, a.SALARY
-> FROM CUSTOMERS a, CUSTOMERS b
-> WHERE a.SALARY < b.SALARY;
```

ID	NAME	SALARY
2	Ramesh	1500.00
2	kaushik	1500.00
6	Chaitali	4500.00
3	Chaitali	2000.00
2	Chaitali	1500.00
1	Chaitali	2000.00
6	Hardik	4500.00
4	Hardik	6500.00
3	Hardik	2000.00
2	Hardik	1500.00
1	Hardik	2000.00
3	Komal	2000.00
2	Komal	1500.00
1	Komal	2000.00
6	Muffy	4500.00
5	Muffy	8500.00
4	Muffy	6500.00
3	Muffy	2000.00
2	Muffy	1500.00
1	Muffy	2000.00

20 rows in set (0.00 sec)

```
mysql> SELECT ID, NAME, AMOUNT, DATE
-> FROM CUSTOMERS, ORDERS;
```

ID	NAME	AMOUNT	DATE
1	Ramesh	2060	2008-05-20 00:00:00
1	Ramesh	3000	2009-10-08 00:00:00
1	Ramesh	1560	2009-11-20 00:00:00
1	Ramesh	1500	2009-10-08 00:00:00
2	Khilan	2060	2008-05-20 00:00:00
2	Khilan	3000	2009-10-08 00:00:00
2	Khilan	1560	2009-11-20 00:00:00
2	Khilan	1500	2009-10-08 00:00:00
3	kaushik	2060	2008-05-20 00:00:00
3	kaushik	3000	2009-10-08 00:00:00
3	kaushik	1560	2009-11-20 00:00:00
3	kaushik	1500	2009-10-08 00:00:00
4	Chaitali	2060	2008-05-20 00:00:00
4	Chaitali	3000	2009-10-08 00:00:00
4	Chaitali	1560	2009-11-20 00:00:00

4	Chaitali	1500	2009-10-08 00:00:00
5	Hardik	2060	2008-05-20 00:00:00
5	Hardik	3000	2009-10-08 00:00:00
5	Hardik	1560	2009-11-20 00:00:00
5	Hardik	1500	2009-10-08 00:00:00
6	Komal	2060	2008-05-20 00:00:00
6	Komal	3000	2009-10-08 00:00:00
6	Komal	1560	2009-11-20 00:00:00
6	Komal	1500	2009-10-08 00:00:00
7	Muffy	2060	2008-05-20 00:00:00
7	Muffy	3000	2009-10-08 00:00:00
7	Muffy	1560	2009-11-20 00:00:00
7	Muffy	1500	2009-10-08 00:00:00

28 rows in set (0.00 sec)

```
mysql> SELECT ID, NAME, AMOUNT, DATE
-> FROM CUSTOMERS
-> LEFT JOIN ORDERS
-> ON CUSTOMERS.ID = ORDERS.CUSTOMER_ID
-> UNION
-> SELECT ID, NAME, AMOUNT, DATE
-> FROM CUSTOMERS
-> RIGHT JOIN ORDERS
-> ON CUSTOMERS.ID = ORDERS.CUSTOMER_ID;
```

ID	NAME	AMOUNT	DATE
1	Ramesh	NULL	NULL
2	Khilan	1560	2009-11-20 00:00:00
3	kaushik	3000	2009-10-08 00:00:00
3	kaushik	1500	2009-10-08 00:00:00
4	Chaitali	2060	2008-05-20 00:00:00
5	Hardik	NULL	NULL
6	Komal	NULL	NULL
7	Muffy	NULL	NULL

8 rows in set (0.00 sec)

```
mysql> SELECT ID, NAME, AMOUNT, DATE
-> FROM CUSTOMERS
-> LEFT JOIN ORDERS
-> ON CUSTOMERS.ID = ORDERS.CUSTOMER_ID
-> UNION ALL
-> SELECT ID, NAME, AMOUNT, DATE
-> FROM CUSTOMERS
-> RIGHT JOIN ORDERS
-> ON CUSTOMERS.ID = ORDERS.CUSTOMER_ID;
```

ID	NAME	AMOUNT	DATE
1	Ramesh	NULL	NULL
2	Khilan	1560	2009-11-20 00:00:00
3	kaushik	3000	2009-10-08 00:00:00
3	kaushik	1500	2009-10-08 00:00:00
4	Chaitali	2060	2008-05-20 00:00:00
5	Hardik	NULL	NULL
6	Komal	NULL	NULL
7	Muffy	NULL	NULL
3	kaushik	1500	2009-10-08 00:00:00
2	Khilan	1560	2009-11-20 00:00:00
3	kaushik	3000	2009-10-08 00:00:00
4	Chaitali	2060	2008-05-20 00:00:00

12 rows in set (0.00 sec)

```
mysql> SELECT ID, NAME, AMOUNT, DATE
-> FROM CUSTOMERS
-> LEFT JOIN ORDERS
-> ON CUSTOMERS.ID = ORDERS.CUSTOMER_ID
-> INTERSECT
-> SELECT ID, NAME, AMOUNT, DATE
-> FROM CUSTOMERS
-> RIGHT JOIN ORDERS
-> ON CUSTOMERS.ID = ORDERS.CUSTOMER_ID;
```

ID	NAME	AMOUNT	DATE
2	Khilan	1560	2009-11-20 00:00:00
3	kaushik	3000	2009-10-08 00:00:00
3	kaushik	1500	2009-10-08 00:00:00
4	Chaitali	2060	2008-05-20 00:00:00

4 rows in set (0.00 sec)

```
mysql> SELECT ID, NAME, AMOUNT, DATE
-> FROM CUSTOMERS
-> LEFT JOIN ORDERS
-> ON CUSTOMERS.ID = ORDERS.CUSTOMER_ID
-> EXCEPT
-> SELECT ID, NAME, AMOUNT, DATE
-> FROM CUSTOMERS
-> RIGHT JOIN ORDERS
-> ON CUSTOMERS.ID = ORDERS.CUSTOMER_ID;
```

ID	NAME	AMOUNT	DATE
1	Ramesh	NULL	NULL
5	Hardik	NULL	NULL
6	Komal	NULL	NULL
7	Muffy	NULL	NULL

4 rows in set (0.00 sec)

```
mysql> select * from customers;
```

ID	NAME	AGE	ADDRESS	SALARY
1	Ramesh	32	Ahmedabad	2000.00
2	Khilan	25	Delhi	1500.00
3	kaushik	23	Kota	2000.00
4	Chaitali	25	Mumbai	6500.00
5	Hardik	27	Bhopal	8500.00
6	Komal	22	MP	4500.00
7	Muffy	24	Indore	10000.00

7 rows in set (0.00 sec)

```
mysql> select * from orders;
```

OID	DATE	CUSTOMER_ID	AMOUNT
100	2009-10-08 00:00:00	3	1500
101	2009-11-20 00:00:00	2	1560
102	2009-10-08 00:00:00	3	3000
103	2008-05-20 00:00:00	4	2060

4 rows in set (0.00 sec)

```
mysql> desc customers;
```

Field	Type	Null	Key	Default	Extra
ID	int	NO	PRI	NULL	
NAME	varchar(20)	NO		NULL	
AGE	int	NO		NULL	
ADDRESS	varchar(25)	YES		NULL	
SALARY	decimal(18,2)	YES		NULL	

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

```
mysql> desc orders;
```

Field	Type	Null	Key	Default	Extra
OID	int	NO	PRI	NULL	
DATE	datetime	YES		NULL	
CUSTOMER_ID	int	YES		NULL	
AMOUNT	double	YES		NULL	

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

```
mysql> SELECT ID, NAME, AGE, ADDRESS, SALARY
-> FROM CUSTOMERS
-> WHERE SALARY IS NOT NULL;
```

ID	NAME	AGE	ADDRESS	SALARY
1	Ramesh	32	Ahmedabad	2000.00
2	Khilan	25	Delhi	1500.00
3	kaushik	23	Kota	2000.00
4	Chaitali	25	Mumbai	6500.00
5	Hardik	27	Bhopal	8500.00
6	Komal	22	MP	4500.00
7	Muffy	24	Indore	10000.00

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

```
mysql> SELECT ID, NAME, AGE, ADDRESS, SALARY
-> FROM CUSTOMERS
-> WHERE SALARY IS NULL;
```

```
Empty set (0.00 sec)
```

```
mysql> SELECT ID, NAME, AGE, ADDRESS, SALARY
-> FROM CUSTOMERS
-> WHERE NAME IS NOT NULL;
```

ID	NAME	AGE	ADDRESS	SALARY
1	Ramesh	32	Ahmedabad	2000.00
2	Khilan	25	Delhi	1500.00
3	kaushik	23	Kota	2000.00
4	Chaitali	25	Mumbai	6500.00
5	Hardik	27	Bhopal	8500.00
6	Komal	22	MP	4500.00
7	Muffy	24	Indore	10000.00

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

```
mysql> SELECT ID, NAME, AGE, ADDRESS, SALARY
-> FROM CUSTOMERS
-> WHERE NAME IS NULL;
```

Empty set (0.00 sec)

```
mysql> SELECT C.ID, C.NAME, C.AGE, O.AMOUNT
->      FROM CUSTOMERS AS C, ORDERS AS O
->      WHERE C.ID = O.CUSTOMER_ID;
```

ID	NAME	AGE	AMOUNT
3	kaushik	23	1500
2	Khilan	25	1560
3	kaushik	23	3000
4	Chaitali	25	2060

4 rows in set (0.00 sec)

```
mysql> SELECT ID AS CUSTOMER_ID, NAME AS CUSTOMER_NAME
->      FROM CUSTOMERS
->      WHERE SALARY IS NOT NULL;
```

CUSTOMER_ID	CUSTOMER_NAME
1	Ramesh
2	Khilan
3	kaushik
4	Chaitali
5	Hardik
6	Komal
7	Muffy

7 rows in set (0.00 sec)

```
mysql> ^C
mysql> ALTER TABLE CUSTOMERS ADD SEX char(1);
Query OK, 0 rows affected (0.06 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> select * from customers;
```

ID	NAME	AGE	ADDRESS	SALARY	SEX
1	Ramesh	32	Ahmedabad	2000.00	NULL
2	Khilan	25	Delhi	1500.00	NULL
3	kaushik	23	Kota	2000.00	NULL
4	Chaitali	25	Mumbai	6500.00	NULL
5	Hardik	27	Bhopal	8500.00	NULL
6	Komal	22	MP	4500.00	NULL
7	Muffy	24	Indore	10000.00	NULL

7 rows in set (0.00 sec)

```
mysql> alter table customers drop column sex;
Query OK, 0 rows affected (0.05 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> select * from customers;
```

ID	NAME	AGE	ADDRESS	SALARY
1	Ramesh	32	Ahmedabad	2000.00
2	Khilan	25	Delhi	1500.00
3	kaushik	23	Kota	2000.00
4	Chaitali	25	Mumbai	6500.00
5	Hardik	27	Bhopal	8500.00
6	Komal	22	MP	4500.00



```
| 7 | Muffy | 24 | Indore | 10000.00 |
+---+-----+-----+-----+-----+
7 rows in set (0.00 sec)
```

```
mysql> create view customers_view as
-> select name, age from customers;
Query OK, 0 rows affected (0.04 sec)
```

```
mysql> select * from customers_view;
+-----+-----+
| name | age |
+-----+-----+
| Ramesh | 32 |
| Khilan | 25 |
| kaushik | 23 |
| Chaitali | 25 |
| Hardik | 27 |
| Komal | 22 |
| Muffy | 24 |
+-----+-----+
7 rows in set (0.00 sec)
```

```
mysql> select * from customers group by age having count(age) >= 2;
ERROR 1055 (42000): Expression #1 of SELECT list is not in GROUP BY clause and
contains nonaggregated column 'nit.customers.ID' which is not functionally
dependent on columns in GROUP BY clause; this is incompatible with
sql_mode=only_full_group_by
mysql> delete from customers where age = 27;
Query OK, 1 row affected (0.01 sec)
```

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

```
mysql> select * from customers;
+---+-----+-----+-----+-----+
| ID | NAME | AGE | ADDRESS | SALARY |
+---+-----+-----+-----+-----+
| 1 | Ramesh | 32 | Ahmedabad | 2000.00 |
| 2 | Khilan | 25 | Delhi | 1500.00 |
| 3 | kaushik | 23 | Kota | 2000.00 |
| 4 | Chaitali | 25 | Mumbai | 6500.00 |
| 6 | Komal | 22 | MP | 4500.00 |
| 7 | Muffy | 24 | Indore | 10000.00 |
+---+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

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

```
mysql> select * from customers;
+---+-----+-----+-----+-----+
| ID | NAME | AGE | ADDRESS | SALARY |
+---+-----+-----+-----+-----+
| 1 | Ramesh | 32 | Ahmedabad | 2000.00 |
| 2 | Khilan | 25 | Delhi | 1500.00 |
| 3 | kaushik | 23 | Kota | 2000.00 |
| 4 | Chaitali | 25 | Mumbai | 6500.00 |
| 6 | Komal | 22 | MP | 4500.00 |
| 7 | Muffy | 24 | Indore | 10000.00 |
+---+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

```
mysql> delete from customers where age = 27;
Query OK, 0 rows affected (0.00 sec)
```

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

```
mysql> select * from customers;
+----+-----+-----+-----+-----+
| ID | NAME      | AGE | ADDRESS  | SALARY |
+----+-----+-----+-----+-----+
| 1  | Ramesh    | 32  | Ahmedabad | 2000.00 |
| 2  | Khilan    | 25  | Delhi    | 1500.00 |
| 3  | kaushik   | 23  | Kota     | 2000.00 |
| 4  | Chaitali  | 25  | Mumbai   | 6500.00 |
| 6  | Komal     | 22  | MP       | 4500.00 |
| 7  | Muffy     | 24  | Indore   | 10000.00 |
+----+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

```
mysql> insert into customers
-> values (5,"Hardik",27,"Bhopal",8500);
Query OK, 1 row affected (0.01 sec)
```

```
mysql> select * from customers;
+----+-----+-----+-----+-----+
| ID | NAME      | AGE | ADDRESS  | SALARY |
+----+-----+-----+-----+-----+
| 1  | Ramesh    | 32  | Ahmedabad | 2000.00 |
| 2  | Khilan    | 25  | Delhi    | 1500.00 |
| 3  | kaushik   | 23  | Kota     | 2000.00 |
| 4  | Chaitali  | 25  | Mumbai   | 6500.00 |
| 5  | Hardik    | 27  | Bhopal   | 8500.00 |
| 6  | Komal     | 22  | MP       | 4500.00 |
| 7  | Muffy     | 24  | Indore   | 10000.00 |
+----+-----+-----+-----+-----+
7 rows in set (0.00 sec)
```

```
mysql> delete from customers where age = 27;
Query OK, 1 row affected (0.01 sec)
```

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

```
mysql> select * from customers;
+----+-----+-----+-----+-----+
| ID | NAME      | AGE | ADDRESS  | SALARY |
+----+-----+-----+-----+-----+
| 1  | Ramesh    | 32  | Ahmedabad | 2000.00 |
| 2  | Khilan    | 25  | Delhi    | 1500.00 |
| 3  | kaushik   | 23  | Kota     | 2000.00 |
| 4  | Chaitali  | 25  | Mumbai   | 6500.00 |
| 6  | Komal     | 22  | MP       | 4500.00 |
| 7  | Muffy     | 24  | Indore   | 10000.00 |
+----+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

```
mysql> insert into customers
-> values (5,"Hardik",27,"Bhopal",8500);
Query OK, 1 row affected (0.05 sec)
```

```
mysql> select * from customers;
+----+-----+-----+-----+-----+
| ID | NAME      | AGE | ADDRESS  | SALARY |
+----+-----+-----+-----+-----+
| 1  | Ramesh    | 32  | Ahmedabad | 2000.00 |
| 2  | Khilan    | 25  | Delhi    | 1500.00 |
+----+-----+-----+-----+-----+
```

3	kaushik	23	Kota	2000.00
4	Chaitali	25	Mumbai	6500.00
5	Hardik	27	Bhopal	8500.00
6	Komal	22	MP	4500.00
7	Muffy	24	Indore	10000.00

7 rows in set (0.00 sec)

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

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

```
mysql> select * from customers;
```

ID	NAME	AGE	ADDRESS	SALARY
1	Ramesh	32	Ahmedabad	2000.00
2	Khilan	25	Delhi	1500.00
3	kaushik	23	Kota	2000.00
4	Chaitali	25	Mumbai	6500.00
5	Hardik	27	Bhopal	8500.00
6	Komal	22	MP	4500.00
7	Muffy	24	Indore	10000.00

7 rows in set (0.00 sec)

```
mysql> delete from customers where age = 27;
Query OK, 1 row affected (0.00 sec)
```

```
mysql> rollback;
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> select * from customers;
```

ID	NAME	AGE	ADDRESS	SALARY
1	Ramesh	32	Ahmedabad	2000.00
2	Khilan	25	Delhi	1500.00
3	kaushik	23	Kota	2000.00
4	Chaitali	25	Mumbai	6500.00
5	Hardik	27	Bhopal	8500.00
6	Komal	22	MP	4500.00
7	Muffy	24	Indore	10000.00

7 rows in set (0.00 sec)

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

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

```
mysql> delete from customers where age = 27;
Query OK, 1 row affected (0.01 sec)
```

```
mysql> select * from customers;
```

ID	NAME	AGE	ADDRESS	SALARY
1	Ramesh	32	Ahmedabad	2000.00
2	Khilan	25	Delhi	1500.00

3	kaushik	23	Kota	2000.00
4	Chaitali	25	Mumbai	6500.00
6	Komal	22	MP	4500.00
7	Muffy	24	Indore	10000.00

6 rows in set (0.00 sec)

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

```
mysql> select * from customers;
```

ID	NAME	AGE	ADDRESS	SALARY
1	Ramesh	32	Ahmedabad	2000.00
2	Khilan	25	Delhi	1500.00
3	kaushik	23	Kota	2000.00
4	Chaitali	25	Mumbai	6500.00
6	Komal	22	MP	4500.00
7	Muffy	24	Indore	10000.00

6 rows in set (0.00 sec)

```
mysql> insert into customers
-> values (5,"Hardik",27,"Bhopal",8500);
Query OK, 1 row affected (0.01 sec)
```

```
mysql> select * from customers;
```

ID	NAME	AGE	ADDRESS	SALARY
1	Ramesh	32	Ahmedabad	2000.00
2	Khilan	25	Delhi	1500.00
3	kaushik	23	Kota	2000.00
4	Chaitali	25	Mumbai	6500.00
5	Hardik	27	Bhopal	8500.00
6	Komal	22	MP	4500.00
7	Muffy	24	Indore	10000.00

7 rows in set (0.00 sec)

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

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

```
mysql> delete from customers where age = 27;
Query OK, 1 row affected (0.00 sec)
```

```
mysql> rollback;
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> select * from customers;
```

ID	NAME	AGE	ADDRESS	SALARY
1	Ramesh	32	Ahmedabad	2000.00
2	Khilan	25	Delhi	1500.00
3	kaushik	23	Kota	2000.00
4	Chaitali	25	Mumbai	6500.00
5	Hardik	27	Bhopal	8500.00
6	Komal	22	MP	4500.00
7	Muffy	24	Indore	10000.00

```
+----+-----+----+-----+-----+
7 rows in set (0.00 sec)
```

```
mysql> savepoint sp1;
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> delete * from customers where id = 1;
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 '*
from customers where id = 1' at line 1
mysql> delete from customers where id = 1;
Query OK, 1 row affected (0.00 sec)
```

```
mysql> savepoint sp2;
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> delete * from customers where id = 2;
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 '*
from customers where id = 2' at line 1
mysql> delete from customers where id = 2;
Query OK, 1 row affected (0.00 sec)
```

```
mysql> savepoint sp3;
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> delete from customers where id = 3;
Query OK, 1 row affected (0.00 sec)
```

```
mysql> rollback to sp2;
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> select * from customers;
+----+-----+----+-----+-----+
| ID | NAME      | AGE | ADDRESS | SALARY |
+----+-----+----+-----+-----+
| 2  | Khilan    | 25  | Delhi   | 1500.00 |
| 3  | kaushik   | 23  | Kota    | 2000.00 |
| 4  | Chaitali  | 25  | Mumbai  | 6500.00 |
| 5  | Hardik    | 27  | Bhopal  | 8500.00 |
| 6  | Komal     | 22  | MP      | 4500.00 |
| 7  | Muffy     | 24  | Indore  | 10000.00 |
+----+-----+----+-----+-----+
6 rows in set (0.00 sec)
```

```
mysql> rollback to sp1;
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> select * from customers;
+----+-----+----+-----+-----+
| ID | NAME      | AGE | ADDRESS | SALARY |
+----+-----+----+-----+-----+
| 1  | Ramesh    | 32  | Ahmedabad | 2000.00 |
| 2  | Khilan    | 25  | Delhi   | 1500.00 |
| 3  | kaushik   | 23  | Kota    | 2000.00 |
| 4  | Chaitali  | 25  | Mumbai  | 6500.00 |
| 5  | Hardik    | 27  | Bhopal  | 8500.00 |
| 6  | Komal     | 22  | MP      | 4500.00 |
| 7  | Muffy     | 24  | Indore  | 10000.00 |
+----+-----+----+-----+-----+
7 rows in set (0.00 sec)
```

```
mysql> release savepoint sp3;
ERROR 1305 (42000): SAVEPOINT sp3 does not exist
```

```
mysql> release savepoint sp1;  
Query OK, 0 rows affected (0.00 sec)  
  
mysql>
```