

```
mysql> show databases;
```

Database
information_schema
mydb
mysql
nit
performance_schema
sakila
sys
world

8 rows in set (0.00 sec)

```
mysql> use nit;
```

Database changed

```
mysql> create table customers(
```

```

->     ID int NOT NULL,
->     NAME varchar(20) NOT NULL,
->     AGE int NOT NULL,
->     ADDRESS varchar(25),
->     SALARY decimal(18,2),
->     primary key(ID)
-> );
```

Query OK, 0 rows affected (0.05 sec)

```
mysql> insert into customers
```

```

-> values (1,"Ramesh",32,"Ahmedabad",2000),
->        (2,"Khilan",25,"Delhi",1500),
->        (3,"kaushik",23,"Kota",2000),
->        (4,"Chaitali",25,"Mumbai",6500),
->        (5,"Hardik",27,"Bhopal",8500),
->        (6,"Komal",22,"MP",4500),
->        (7,"Muffy",24,"Indore",10000);
```

Query OK, 7 rows affected (0.02 sec)

Records: 7 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> alter table customers modify salary decimal(18,2) not null;
```

Query OK, 0 rows affected (0.10 sec)

Records: 0 Duplicates: 0 Warnings: 0

```
mysql> alter table customers modify salary decimal(18,2) default 5000.00;
```

Query OK, 0 rows affected (0.07 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> 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> alter table customers alter salary set default 8000.00;

Query OK, 0 rows affected (0.02 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> insert into customers(ID, NAME, AGE, ADDRESS) values(8, 'Bob', 40, 'Hyd');

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
8	Bob	40	Hyd	8000.00

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

8 rows in set (0.00 sec)

mysql> alter table customers alter column salary drop default;

Query OK, 0 rows affected (0.02 sec)

Records: 0 Duplicates: 0 Warnings: 0

```
mysql> alter table customers modify age int not null unique;
ERROR 1062 (23000): Duplicate entry '25' for key 'customers.age'
mysql> alter table customers drop index myUniqueConstraint;
ERROR 1091 (42000): Can't DROP 'myUniqueConstraint'; check that column/key exists
mysql> alter table customers drop constraint unique;
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 'unique' at line 1
mysql> alter table customers drop constraint myUniqueConstraint;
ERROR 3940 (HY000): Constraint 'myUniqueConstraint' does not exist.
mysql> alter table customers add constraint myUniqueConstraint
unique(age,salary);
Query OK, 0 rows affected (0.03 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> alter table customers drop index myUniqueConstraint;
Query OK, 0 rows affected (0.02 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> alter table customers add constraint pk_custid primary key(id, name);
ERROR 1068 (42000): Multiple primary key defined
mysql> alter table customers drop primary key (name);
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 '(name)' at line 1
mysql> alter table customers drop primary key;
Query OK, 8 rows affected (0.09 sec)
Records: 8 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 |
| 8  | Bob       | 40  | Hyd      | 8000.00 |
+----+-----+-----+-----+-----+
8 rows in set (0.00 sec)
```

```
mysql> desc customers;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| ID    | int           | NO   |     | 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> alter table customers add primary key(ID);
Query OK, 0 rows affected (0.10 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> desc customers;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| ID    | int           | NO   |     | 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)
```

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> alter table customers drop primary key;

Query OK, 8 rows affected (0.10 sec)

Records: 8 Duplicates: 0 Warnings: 0

mysql> desc customers;

Field	Type	Null	Key	Default	Extra	
ID	int	NO		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> alter table customers add primary key(ID);

Query OK, 0 rows affected (0.12 sec)

Records: 0 Duplicates: 0 Warnings: 0

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> create table orders(

-> ID int NOT NULL,

-> DATE datetime,

-> CUSTOMER\_ID int references customers(id),

-> AMOUNT double,

-> primary key(ID)

-> );

Query OK, 0 rows affected (0.04 sec)

mysql> select \* from orders;

Empty set (0.00 sec)

mysql> desc orders;

Field	Type	Null	Key	Default	Extra	
ID	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> alter table orders add foreign key customer_id references customers(id);
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
'references customers(id)' at line 1
mysql> alter table orders add foreign key (customer_id) references
customers(id);
Query OK, 0 rows affected (0.16 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> desc orders;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| ID         | int       | NO   | PRI | NULL    |       |
| DATE       | datetime  | YES  |     | NULL    |       |
| CUSTOMER_ID | int       | YES  | MUL | NULL    |       |
| AMOUNT     | double    | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

```
mysql> alter table orders drop foreign key;
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> alter table customers modify age int not null check (age >= 18);
Query OK, 8 rows affected (0.16 sec)
Records: 8 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 |
| 8  | Bob       | 40  | Hyd        | 8000.00 |
+----+-----+-----+-----+-----+
8 rows in set (0.00 sec)
```

```
mysql> alter table customers add constraint chk_pAge check (Age >= 18);
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 '=
18)' at line 1
mysql> alter table customers add constraint chk_pAge check (Age >= 22);
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 '=
22)' at line 1
mysql> alter table customers add constraint chk_pAge check (Age >= 18);
Query OK, 8 rows affected (0.12 sec)
Records: 8 Duplicates: 0 Warnings: 0
```

```
mysql> alter table customers drop constraint chk_pAge;
Query OK, 0 rows affected (0.03 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
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> create index idx\_age on customers(age);

Query OK, 0 rows affected (0.07 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> desc customers;

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

5 rows in set (0.00 sec)

mysql> alter table customers drop index idx\_age;

Query OK, 0 rows affected (0.03 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql>