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MySQL 8.0 Command Line Cli x + v
Enter password: *****
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 36
Server version: 8.0.44 MySQL Community Server - GPL

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affiliates. Other names may be trademarks of their respective
owners.

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

mysql> show databases;
+-----+
| Database |
+-----+
| databasename |
| information_schema |
| my_database |
| mysql |
| nit |
| performance_schema |
| student_db |
| sys |
| testdb |
+-----+
9 rows in set (0.01 sec)

mysql> use nit;
Database changed
mysql> show tables;
+-----+
| Tables_in_nit |
+-----+
| student |
+-----+
1 row in set (0.00 sec)

mysql> select * from student;
+-----+
| name | id | address | marks |
+-----+
| karthik | 12 | hyd | 78 |
| cathy | 17 | delhi | 90 |
| reddy | 40 | bng | 66 |
| alex | 45 | chennai | 79 |
| dolly | 48 | pune | 67 |
| chancy | 78 | mumbai | 34 |
+-----+
6 rows in set (0.00 sec)

mysql> alter table student add phoneNo int;
Query OK, 0 rows affected (0.13 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> select * from student;
+-----+
| name | id | address | marks | phoneNo |
+-----+
| karthik | 12 | hyd | 78 | NULL |
| cathy | 17 | delhi | 90 | NULL |
| reddy | 40 | bng | 66 | NULL |
| alex | 45 | chennai | 79 | NULL |
| dolly | 48 | pune | 67 | NULL |
| chancy | 78 | mumbai | 34 | NULL |
+-----+
6 rows in set (0.00 sec)

mysql> update student set phoneNo=123;
Query OK, 6 rows affected (0.02 sec)
Rows matched: 6 Changed: 6 Warnings: 0

mysql> select * from student;
+-----+
| name | id | address | marks | phoneNo |
+-----+
| karthik | 12 | hyd | 78 | 123 |
| cathy | 17 | delhi | 90 | 123 |
+-----+
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mysql> select * from student;
+-----+-----+-----+-----+-----+
| name | id | address | marks | phoneNo |
+-----+-----+-----+-----+-----+
| karthik | 12 | hyd | 78 | 123 |
| cathy | 17 | delhi | 90 | 123 |
| reddy | 40 | bng | 66 | 123 |
| alex | 45 | chennai | 79 | 123 |
| dolly | 48 | pune | 67 | 123 |
| chancy | 78 | mumbai | 34 | 123 |
+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)

mysql> update student set phoneNo=456 where id=12;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> select * from student;
+-----+-----+-----+-----+-----+
| name | id | address | marks | phoneNo |
+-----+-----+-----+-----+-----+
| karthik | 12 | hyd | 78 | 456 |
| cathy | 17 | delhi | 90 | 123 |
| reddy | 40 | bng | 66 | 123 |
| alex | 45 | chennai | 79 | 123 |
| dolly | 48 | pune | 67 | 123 |
| chancy | 78 | mumbai | 34 | 123 |
+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)

mysql> desc student;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| name | varchar(30) | YES |  | NULL |  |
| id | int | NO | PRI | NULL |  |
| address | varchar(50) | YES |  | NULL |  |
| marks | int | YES |  | NULL |  |
| phoneNo | int | YES |  | NULL |  |
+-----+-----+-----+-----+-----+-----+

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mysql> desc student;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| name | varchar(30) | YES |  | NULL |  |
| id | int | NO | PRI | NULL |  |
| address | varchar(50) | YES |  | NULL |  |
| marks | int | YES |  | NULL |  |
| phoneNo | int | YES |  | NULL |  |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.01 sec)

mysql> alter table student modify column name varchar(60);
Query OK, 0 rows affected (0.02 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> desc student;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| name | varchar(60) | YES |  | NULL |  |
| id | int | NO | PRI | NULL |  |
| address | varchar(50) | YES |  | NULL |  |
| marks | int | YES |  | NULL |  |
| phoneNo | int | YES |  | NULL |  |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> alter table student drop column phoneNo;
Query OK, 0 rows affected (0.02 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> select * from student;
+-----+-----+-----+-----+
| name | id | address | marks |
+-----+-----+-----+-----+
| karthik | 12 | hyd | 78 |
| cathy | 17 | delhi | 90 |
| reddy | 40 | bng | 66 |
| alex | 45 | chennai | 79 |
+-----+-----+-----+-----+
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MySQL 8.0 Command Line Cli  x  +  v

mysql> select * from student;
+-----+-----+-----+-----+
| name  | id  | address | marks |
+-----+-----+-----+-----+
| karthik | 12 | hyd     | 78    |
| cathy  | 17 | delhi   | 90    |
| reddy  | 40 | bng     | 66    |
| alex   | 45 | chennai | 79    |
| dolly  | 48 | pune    | 67    |
| chancy | 78 | mumbai  | 34    |
+-----+-----+-----+-----+
6 rows in set (0.00 sec)

mysql> delete from student where name='kodi';
Query OK, 0 rows affected (0.01 sec)

mysql> select * from student;
+-----+-----+-----+-----+
| name  | id  | address | marks |
+-----+-----+-----+-----+
| karthik | 12 | hyd     | 78    |
| cathy  | 17 | delhi   | 90    |
| reddy  | 40 | bng     | 66    |
| alex   | 45 | chennai | 79    |
| dolly  | 48 | pune    | 67    |
| chancy | 78 | mumbai  | 34    |
+-----+-----+-----+-----+
6 rows in set (0.00 sec)

mysql> select sum(marks) from student;
+-----+
| sum(marks) |
+-----+
|         414 |
+-----+
1 row in set (0.00 sec)

mysql> select avg(marks) from student;
+-----+
| avg(marks) |
+-----+
| 69.0000    |
+-----+
1 row in set (0.00 sec)

mysql> select avg(marks) from student;
+-----+
| avg(marks) |
+-----+
| 69.0000    |
+-----+
1 row in set (0.00 sec)

mysql> select count(name) from student;
+-----+
| count(name) |
+-----+
|           6 |
+-----+
1 row in set (0.01 sec)

mysql> select max(marks) from student;
+-----+
| max(marks) |
+-----+
|          90 |
+-----+
1 row in set (0.00 sec)

mysql> select min(marks) from student;
+-----+
| min(marks) |
+-----+
|          34 |
+-----+
1 row in set (0.00 sec)

mysql> select * from student order by marks;
+-----+-----+-----+-----+
| name  | id  | address | marks |
+-----+-----+-----+-----+
| chancy | 78 | mumbai  | 34    |
| reddy  | 40 | bng     | 66    |
| dolly  | 48 | pune    | 67    |
| karthik | 12 | hyd     | 78    |
+-----+-----+-----+-----+
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MySQL 8.0 Command Line Cli  x  +  v

mysql> select * from student order by marks;
+----+-----+-----+-----+
| name | id | address | marks |
+----+-----+-----+-----+
| chancy | 78 | mumbai | 34 |
| reddy | 48 | bng | 66 |
| dolly | 48 | pune | 67 |
| karthik | 12 | hyd | 78 |
| alex | 45 | chennai | 79 |
| cathy | 17 | delhi | 90 |
+----+-----+-----+-----+
6 rows in set (0.00 sec)

mysql> select * from student order by marks desc;
+----+-----+-----+-----+
| name | id | address | marks |
+----+-----+-----+-----+
| cathy | 17 | delhi | 90 |
| alex | 45 | chennai | 79 |
| karthik | 12 | hyd | 78 |
| dolly | 48 | pune | 67 |
| reddy | 48 | bng | 66 |
| chancy | 78 | mumbai | 34 |
+----+-----+-----+-----+
6 rows in set (0.00 sec)

mysql> select * from student where name like 'a%';
+----+-----+-----+-----+
| name | id | address | marks |
+----+-----+-----+-----+
| alex | 45 | chennai | 79 |
+----+-----+-----+-----+
1 row in set (0.00 sec)

mysql> select * from student where name like '%y';
+----+-----+-----+-----+
| name | id | address | marks |
+----+-----+-----+-----+
| cathy | 17 | delhi | 90 |
| reddy | 48 | bng | 66 |
+----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> select * from student where name like '%s';
+----+-----+-----+-----+
| name | id | address | marks |
+----+-----+-----+-----+
| cathy | 17 | delhi | 90 |
| reddy | 48 | bng | 66 |
| dolly | 48 | pune | 67 |
| chancy | 78 | mumbai | 34 |
+----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> select * from student where name like '_a%';
+----+-----+-----+-----+
| name | id | address | marks |
+----+-----+-----+-----+
| karthik | 12 | hyd | 78 |
| cathy | 17 | delhi | 90 |
+----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> select * from student where name like '%s_';
Empty set (0.00 sec)

mysql> create table emp(id int not null primary key,salary int,empcode int,name varchar(30));
Query OK, 0 rows affected (0.04 sec)

mysql> insert into emp values(12, 20000,102,'aman'),(23,60000,104,'arup'),(78,30000,105,'max'),
-> (80,25000,103,'ram'),(34,90000,106,'sam');
Query OK, 5 rows affected (0.01 sec)
Records: 5 Duplicates: 0 Warnings: 0

mysql> select * from emp;
+----+-----+-----+-----+
| id | salary | empcode | name |
+----+-----+-----+-----+
| 12 | 20000 | 102 | aman |
| 23 | 60000 | 104 | arup |
| 34 | 90000 | 106 | sam |
| 78 | 30000 | 105 | max |
| 80 | 25000 | 103 | ram |
+----+-----+-----+-----+
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mysql> select * from emp;
+-----+-----+-----+-----+
| id | salary | empcode | name |
+-----+-----+-----+-----+
| 12 | 20000 | 102 | aman |
| 23 | 60000 | 104 | arup |
| 34 | 90000 | 106 | sam |
| 78 | 30000 | 105 | max |
| 80 | 25000 | 103 | ram |
+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> show tables;
+-----+
| Tables_in_nit |
+-----+
| emp |
| student |
+-----+
2 rows in set (0.00 sec)

mysql> select * from student;
+-----+-----+-----+-----+
| name | id | address | marks |
+-----+-----+-----+-----+
| karthik | 12 | hyd | 78 |
| cathy | 17 | delhi | 90 |
| reddy | 40 | bng | 66 |
| alex | 45 | chennai | 79 |
| dolly | 48 | pune | 67 |
| chancy | 78 | mumbai | 34 |
+-----+-----+-----+-----+
6 rows in set (0.00 sec)

mysql> select * from student inner join emp on student.id=emp.id;
+-----+-----+-----+-----+-----+-----+-----+-----+
| name | id | address | marks | id | salary | empcode | name |
+-----+-----+-----+-----+-----+-----+-----+-----+
| karthik | 12 | hyd | 78 | 12 | 20000 | 102 | aman |
| chancy | 78 | mumbai | 34 | 78 | 30000 | 105 | max |
+-----+-----+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

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MySQL 8.0 Command Line CLI x + v

mysql> select * from student inner join emp on student.id=emp.id;
+-----+-----+-----+-----+-----+-----+-----+-----+
| name | id | address | marks | id | salary | empcode | name |
+-----+-----+-----+-----+-----+-----+-----+-----+
| karthik | 12 | hyd | 78 | 12 | 20000 | 102 | aman |
| chancy | 78 | mumbai | 34 | 78 | 30000 | 105 | max |
+-----+-----+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> select * from emp inner join student on emp.id=student.id;
+-----+-----+-----+-----+-----+-----+-----+-----+
| id | salary | empcode | name | name | id | address | marks |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 12 | 20000 | 102 | aman | karthik | 12 | hyd | 78 |
| 78 | 30000 | 105 | max | chancy | 78 | mumbai | 34 |
+-----+-----+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> select * from student
-> ;
+-----+-----+-----+-----+
| name | id | address | marks |
+-----+-----+-----+-----+
| karthik | 12 | hyd | 78 |
| cathy | 17 | delhi | 90 |
| reddy | 40 | bng | 66 |
| alex | 45 | chennai | 79 |
| dolly | 48 | pune | 67 |
| chancy | 78 | mumbai | 34 |
+-----+-----+-----+-----+
6 rows in set (0.00 sec)

mysql> select * from emp;
+-----+-----+-----+-----+
| id | salary | empcode | name |
+-----+-----+-----+-----+
| 12 | 20000 | 102 | aman |
| 23 | 60000 | 104 | arup |
| 34 | 90000 | 106 | sam |
| 78 | 30000 | 105 | max |
+-----+-----+-----+-----+
```

```
MySQL 8.0 Command Line Cli x + v
mysql> select * from emp;
+----+-----+-----+-----+
| id | salary | empcode | name |
+----+-----+-----+-----+
| 12 | 20000 | 102 | aman |
| 23 | 60000 | 104 | arup |
| 34 | 90000 | 106 | sam |
| 78 | 30000 | 105 | max |
| 80 | 25000 | 103 | ram |
+----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> select * from student left join emp on student.id=emp.id;
+----+----+-----+-----+----+-----+-----+-----+
| name | id | address | marks | id | salary | empcode | name |
+----+----+-----+-----+----+-----+-----+-----+
| karthik | 12 | hyd | 78 | 12 | 20000 | 102 | aman |
| cathy | 17 | delhi | 90 | NULL | NULL | NULL | NULL |
| reddy | 40 | bng | 66 | NULL | NULL | NULL | NULL |
| alex | 45 | chennai | 79 | NULL | NULL | NULL | NULL |
| dolly | 48 | pune | 67 | NULL | NULL | NULL | NULL |
| chancy | 78 | mumbai | 34 | 78 | 30000 | 105 | max |
+----+----+-----+-----+----+-----+-----+-----+
6 rows in set (0.00 sec)

mysql> select * from emp left join student on emp.id=student.id;
ERROR 1054 (42S22): Unknown column 'emp.id' in 'on clause'
mysql> select * from emp left join student on student.id=emp.id;
ERROR 1054 (42S22): Unknown column 'emp.id' in 'on clause'
mysql> select * from left join student on emp.id=student.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 'f
ro left join student on emp.id=student.id' at line 1
mysql> select * from emp left join student on emp.id=student.id;
+----+-----+-----+-----+-----+-----+-----+-----+
| id | salary | empcode | name | name | id | address | marks |
+----+-----+-----+-----+-----+-----+-----+-----+
| 12 | 20000 | 102 | aman | karthik | 12 | hyd | 78 |
| 23 | 60000 | 104 | arup | NULL | NULL | NULL | NULL |
| 34 | 90000 | 106 | sam | NULL | NULL | NULL | NULL |
| 78 | 30000 | 105 | max | chancy | 78 | mumbai | 34 |
| 80 | 25000 | 103 | ram | NULL | NULL | NULL | NULL |
+----+-----+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> select * from emp left join student on emp.id=student.id;
+----+-----+-----+-----+-----+-----+-----+-----+
| id | salary | empcode | name | name | id | address | marks |
+----+-----+-----+-----+-----+-----+-----+-----+
| 12 | 20000 | 102 | aman | karthik | 12 | hyd | 78 |
| 23 | 60000 | 104 | arup | NULL | NULL | NULL | NULL |
| 34 | 90000 | 106 | sam | NULL | NULL | NULL | NULL |
| 78 | 30000 | 105 | max | chancy | 78 | mumbai | 34 |
| 80 | 25000 | 103 | ram | NULL | NULL | NULL | NULL |
+----+-----+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> select * from student right join emp on student.id=emp.id;
+----+----+-----+-----+----+-----+-----+-----+
| name | id | address | marks | id | salary | empcode | name |
+----+----+-----+-----+----+-----+-----+-----+
| karthik | 12 | hyd | 78 | 12 | 20000 | 102 | aman |
| NULL | NULL | NULL | NULL | 23 | 60000 | 104 | arup |
| NULL | NULL | NULL | NULL | 34 | 90000 | 106 | sam |
| chancy | 78 | mumbai | 34 | 78 | 30000 | 105 | max |
| NULL | NULL | NULL | NULL | 80 | 25000 | 103 | ram |
+----+----+-----+-----+----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> select * from emp right join student on emp.id=student.id;
+----+-----+-----+-----+-----+-----+-----+-----+
| id | salary | empcode | name | name | id | address | marks |
+----+-----+-----+-----+-----+-----+-----+-----+
| 12 | 20000 | 102 | aman | karthik | 12 | hyd | 78 |
| NULL | NULL | NULL | NULL | cathy | 17 | delhi | 90 |
| NULL | NULL | NULL | NULL | reddy | 40 | bng | 66 |
| NULL | NULL | NULL | NULL | alex | 45 | chennai | 79 |
| NULL | NULL | NULL | NULL | dolly | 48 | pune | 67 |
| 78 | 30000 | 105 | max | chancy | 78 | mumbai | 34 |
+----+-----+-----+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)

mysql> select * from student cross join emp;
+----+----+-----+-----+----+-----+-----+-----+
| name | id | address | marks | id | salary | empcode | name |
+----+----+-----+-----+----+-----+-----+-----+

```

