

```
mysql> show databases;
+-----+
| Database |
+-----+
| arithmeticoperators |
| classwork |
| information_schema |
| mysql |
| performance_schema |
| sys |
+-----+
6 rows in set (0.01 sec)
```

```
mysql> use classwork;
Database changed
mysql> create table employee_tbl1(ID int not null primary key,NAME
varchar(40),WORK_DATE DATE , DAILY_TYPING_PAGES int);
Query OK, 0 rows affected (0.05 sec)
```

```
mysql> desc employee_tbl1;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| ID | int | NO | PRI | NULL | |
| NAME | varchar(40) | YES | | NULL | |
| WORK_DATE | date | YES | | NULL | |
| DAILY_TYPING_PAGES | int | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.01 sec)
```

```
mysql> insert into CUSTOMERS values(1,'John',2007-01-
24,250),(2,'Ram',2007-05-27,220),(3,'Jack',2007-05-
06,170),(3,'Jack',2007-04-06,100),(4,'Jill',2007-04-
06,220),(5,'Zara',2007-06-06,300),(5,'Zara',2007-02-06,350);
'> insert into employee_tbl1 values(1,'John',2007-01-
24,250),(2,'Ram',2007-05-27,220),(3,'Jack',2007-05-
06,170),(3,'Jack',2007-04-06,100),(4,'Jill',2007-04-
06,220),(5,'Zara',2007-06-06,300),(5,'Zara',2007-02-06,350);
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 'Zara',2007-06-06,300),(5,'Zara',2007-02-06,350);
insert into employee_tbl1 value' at line 1
mysql> desc employee_tbl1;
```

```
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| ID | int | NO | PRI | NULL | |
| NAME | varchar(40) | YES | | NULL | |
| WORK_DATE | date | YES | | NULL | |
| DAILY_TYPING_PAGES | int | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

```
mysql> select *from employee_tbl1;
Empty set (0.01 sec)
```

```
mysql> insert into employee_tbl1 values(1,'John',2007-01-
24,250),(2,'Ram',2007-05-27,220),(3,'Jack',2007-05-
```

```
06,170),(3,'Jack',2007-04-06,100),(4,'Jill',2007-04-
06,220),(5,'Zara',2007-06-06,300),(5,'Zara',2007-02-06,350);
ERROR 1292 (22007): Incorrect date value: '1982' for column 'WORK_DATE'
at row 1
```

```
mysql> select *from employee_tb1;
Empty set (0.00 sec)
```

```
mysql> insert into employee_tb1 values(1,'John','2007-01-
24',250),(2,'Ram','2007-05-27',220),(3,'Jack','2007-05-
06',170),(3,'Jack','2007-04-06',100),(4,'Jill','2007-04-
06',220),(5,'Zara','2007-06-06',300),(5,'Zara','2007-02-06',350);
ERROR 1062 (23000): Duplicate entry '3' for key 'employee_tb1.PRIMARY'
mysql> select *from employee_tb1;
Empty set (0.00 sec)
```

```
mysql> create table employee_tb1(ID int not null,NAME
varchar(40),WORK_DATE DATE , DAILY_TYPING_PAGES int);
ERROR 1050 (42S01): Table 'employee_tb1' already exists
mysql> DROP database employee_tb1;
ERROR 1008 (HY000): Can't drop database 'employee_tb1'; database doesn't
exist
mysql> DROP table employee_tb1;
Query OK, 0 rows affected (0.04 sec)
```

```
mysql> create table employee_tb1(ID int not null,NAME
varchar(40),WORK_DATE DATE , DAILY_TYPING_PAGES int);
Query OK, 0 rows affected (0.03 sec)
```

```
mysql> insert into employee_tb1 values(1,'John','2007-01-
24',250),(2,'Ram','2007-05-27',220),(3,'Jack','2007-05-
06',170),(3,'Jack','2007-04-06',100),(4,'Jill','2007-04-
06',220),(5,'Zara','2007-06-06',300),(5,'Zara','2007-02-06',350);
Query OK, 7 rows affected (0.01 sec)
Records: 7 Duplicates: 0 Warnings: 0
```

```
mysql> select *from employee_tb1;
+----+-----+-----+-----+-----+
| ID | NAME | WORK_DATE | DAILY_TYPING_PAGES |
+----+-----+-----+-----+
| 1 | John | 2007-01-24 | 250 |
| 2 | Ram | 2007-05-27 | 220 |
| 3 | Jack | 2007-05-06 | 170 |
| 3 | Jack | 2007-04-06 | 100 |
| 4 | Jill | 2007-04-06 | 220 |
| 5 | Zara | 2007-06-06 | 300 |
| 5 | Zara | 2007-02-06 | 350 |
+----+-----+-----+-----+
7 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM employee_tb1;
ERROR 1146 (42S02): Table 'classwork.employee_tb1' doesn't exist
mysql> SELECT COUNT(*) FROM employee_tb1 ;
ERROR 1146 (42S02): Table 'classwork.employee_tb1' doesn't exist
mysql> SELECT COUNT(*) FROM employee_tb1 ;
ERROR 1146 (42S02): Table 'classwork.employee_tb1' doesn't exist
mysql> SELECT COUNT(*) FROM employee_tb1;
+-----+
| COUNT(*) |
```

```

+-----+
|      7 |
+-----+

```

1 row in set (0.01 sec)

```

mysql> SELECT COUNT(*) FROM employee_tbl
->      -> WHERE name="Zara";

```

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 '-> WHERE name="Zara"' at line 2

```

mysql> SELECT COUNT(*) FROM employee_tbl
->      WHERE name="Zara";

```

```

+-----+
| COUNT(*) |
+-----+
|      2 |
+-----+

```

1 row in set (0.01 sec)

```

mysql> select *from employee_tbl;

```

```

+----+-----+-----+-----+-----+
| ID | NAME | WORK_DATE | DAILY_TYPING_PAGES |
+----+-----+-----+-----+
| 1 | John | 2007-01-24 | 250 |
| 2 | Ram | 2007-05-27 | 220 |
| 3 | Jack | 2007-05-06 | 170 |
| 3 | Jack | 2007-04-06 | 100 |
| 4 | Jill | 2007-04-06 | 220 |
| 5 | Zara | 2007-06-06 | 300 |
| 5 | Zara | 2007-02-06 | 350 |
+----+-----+-----+-----+

```

7 rows in set (0.00 sec)

```

mysql> SELECT MAX(daily_typing_pages)
->      FROM employee_tbl;

```

```

+-----+
| MAX(daily_typing_pages) |
+-----+
| 350 |
+-----+

```

1 row in set (0.00 sec)

```

mysql> SELECT id, name, MAX(daily_typing_pages)
->      FROM employee_tbl GROUP BY name;

```

ERROR 1055 (42000): Expression #1 of SELECT list is not in GROUP BY clause and contains nonaggregated column 'classwork.employee_tbl.ID' which is not functionally dependent on columns in GROUP BY clause; this is incompatible with sql_mode=only_full_group_by

```

mysql> SELECT id, name, MAX(daily_typing_pages)
->      FROM employee_tbl GROUP BY name ;

```

ERROR 1055 (42000): Expression #1 of SELECT list is not in GROUP BY clause and contains nonaggregated column 'classwork.employee_tbl.ID' which is not functionally dependent on columns in GROUP BY clause; this is incompatible with sql_mode=only_full_group_by

```

mysql> SELECT MIN(daily_typing_pages) least, MAX(daily_typing_pages) max
->      FROM employee_tbl ;

```

```

+-----+-----+
| least | max |
+-----+-----+

```

```

+-----+-----+
| 100 | 350 |
+-----+-----+
1 row in set (0.00 sec)

```

```

mysql> SELECT * FROM employee_tbl;
+-----+-----+-----+-----+
| ID | NAME | WORK_DATE | DAILY_TYPING_PAGES |
+-----+-----+-----+-----+
| 1 | John | 2007-01-24 | 250 |
| 2 | Ram | 2007-05-27 | 220 |
| 3 | Jack | 2007-05-06 | 170 |
| 3 | Jack | 2007-04-06 | 100 |
| 4 | Jill | 2007-04-06 | 220 |
| 5 | Zara | 2007-06-06 | 300 |
| 5 | Zara | 2007-02-06 | 350 |
+-----+-----+-----+-----+
7 rows in set (0.00 sec)

```

```

mysql> SELECT MIN(daily_typing_pages)
-> FROM employee_tbl;
+-----+
| MIN(daily_typing_pages) |
+-----+
| 100 |
+-----+
1 row in set (0.00 sec)

```

```

mysql> SELECT id, name, work_date, MIN(daily_typing_pages)
-> FROM employee_tbl GROUP BY name;
ERROR 1055 (42000): Expression #1 of SELECT list is not in GROUP BY
clause and contains nonaggregated column 'classwork.employee_tbl.ID'
which is not functionally dependent on columns in GROUP BY clause; this
is incompatible with sql_mode=only_full_group_by
mysql> SELECT * FROM employee_tbl;
+-----+-----+-----+-----+
| ID | NAME | WORK_DATE | DAILY_TYPING_PAGES |
+-----+-----+-----+-----+
| 1 | John | 2007-01-24 | 250 |
| 2 | Ram | 2007-05-27 | 220 |
| 3 | Jack | 2007-05-06 | 170 |
| 3 | Jack | 2007-04-06 | 100 |
| 4 | Jill | 2007-04-06 | 220 |
| 5 | Zara | 2007-06-06 | 300 |
| 5 | Zara | 2007-02-06 | 350 |
+-----+-----+-----+-----+
7 rows in set (0.00 sec)

```

```

mysql> SELECT AVG(daily_typing_pages)
-> FROM employee_tbl;
+-----+
| AVG(daily_typing_pages) |
+-----+
| 230.0000 |
+-----+
1 row in set (0.00 sec)

```

```

mysql> SELECT SUM(daily_typing_pages)

```

```

-> FROM employee_tbl;
+-----+
| SUM(daily_typing_pages) |
+-----+
| 1610 |
+-----+
1 row in set (0.00 sec)

```

```

mysql> select SQRT(16);
+-----+
| SQRT(16) |
+-----+
| 4 |
+-----+
1 row in set (0.01 sec)

```

```

mysql> SELECT * FROM employee_tbl;
+-----+-----+-----+-----+
| ID | NAME | WORK_DATE | DAILY_TYPING_PAGES |
+-----+-----+-----+-----+
| 1 | John | 2007-01-24 | 250 |
| 2 | Ram | 2007-05-27 | 220 |
| 3 | Jack | 2007-05-06 | 170 |
| 3 | Jack | 2007-04-06 | 100 |
| 4 | Jill | 2007-04-06 | 220 |
| 5 | Zara | 2007-06-06 | 300 |
| 5 | Zara | 2007-02-06 | 350 |
+-----+-----+-----+-----+
7 rows in set (0.00 sec)

```

```

mysql> SELECT name, SQRT(daily_typing_pages)
-> FROM employee_tbl;
+-----+-----+
| name | SQRT(daily_typing_pages) |
+-----+-----+
| John | 15.811388300841896 |
| Ram | 14.832396974191326 |
| Jack | 13.038404810405298 |
| Jack | 10 |
| Jill | 14.832396974191326 |
| Zara | 17.320508075688775 |
| Zara | 18.708286933869708 |
+-----+-----+
7 rows in set (0.00 sec)

```

```

mysql> SELECT RAND( ), RAND( ), RAND( );
+-----+-----+-----+
| RAND( ) | RAND( ) | RAND( ) |
+-----+-----+-----+
| 0.5686606229922367 | 0.9228396591943127 | 0.9082164577284981 |
+-----+-----+-----+
1 row in set (0.01 sec)

```

```

mysql> SELECT RAND(1), RAND( ), RAND( );
+-----+-----+-----+
| RAND(1) | RAND( ) | RAND( ) |
+-----+-----+-----+
| 0.40540353712197724 | 0.7725633417931975 | 0.1381673665141383 |
+-----+-----+-----+

```

```
+-----+-----+-----+
1 row in set (0.00 sec)
```

```
mysql> SELECT * FROM employee_tb1;
```

```
+-----+-----+-----+
| ID | NAME | WORK_DATE | DAILY_TYPING_PAGES |
+-----+-----+-----+
| 1 | John | 2007-01-24 | 250 |
| 2 | Ram | 2007-05-27 | 220 |
| 3 | Jack | 2007-05-06 | 170 |
| 3 | Jack | 2007-04-06 | 100 |
| 4 | Jill | 2007-04-06 | 220 |
| 5 | Zara | 2007-06-06 | 300 |
| 5 | Zara | 2007-02-06 | 350 |
+-----+-----+-----+
7 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM employee_tb1 ORDER BY RAND();
```

```
+-----+-----+-----+
| ID | NAME | WORK_DATE | DAILY_TYPING_PAGES |
+-----+-----+-----+
| 3 | Jack | 2007-05-06 | 170 |
| 5 | Zara | 2007-06-06 | 300 |
| 4 | Jill | 2007-04-06 | 220 |
| 5 | Zara | 2007-02-06 | 350 |
| 3 | Jack | 2007-04-06 | 100 |
| 1 | John | 2007-01-24 | 250 |
| 2 | Ram | 2007-05-27 | 220 |
+-----+-----+-----+
7 rows in set (0.01 sec)
```

```
mysql> SELECT * FROM employee_tb1 ORDER BY RAND();
```

```
+-----+-----+-----+
| ID | NAME | WORK_DATE | DAILY_TYPING_PAGES |
+-----+-----+-----+
| 5 | Zara | 2007-06-06 | 300 |
| 3 | Jack | 2007-05-06 | 170 |
| 4 | Jill | 2007-04-06 | 220 |
| 3 | Jack | 2007-04-06 | 100 |
| 5 | Zara | 2007-02-06 | 350 |
| 2 | Ram | 2007-05-27 | 220 |
| 1 | John | 2007-01-24 | 250 |
+-----+-----+-----+
7 rows in set (0.00 sec)
```

```
mysql> SELECT CONCAT('FIRST ', 'SECOND');
```

```
+-----+
| CONCAT('FIRST ', 'SECOND') |
+-----+
| FIRST SECOND                |
+-----+
1 row in set (0.01 sec)
```

```
mysql> SELECT * FROM employee_tb1;
```

```
+-----+-----+-----+
| ID | NAME | WORK_DATE | DAILY_TYPING_PAGES |
+-----+-----+-----+
| 1 | John | 2007-01-24 | 250 |
+-----+-----+-----+
```

2	Ram	2007-05-27	220
3	Jack	2007-05-06	170
3	Jack	2007-04-06	100
4	Jill	2007-04-06	220
5	Zara	2007-06-06	300
5	Zara	2007-02-06	350

7 rows in set (0.00 sec)

```
mysql> SELECT CONCAT(id, name, work_date)
-> FROM employee_tbl;
```

CONCAT(id, name, work_date)
1John2007-01-24
2Ram2007-05-27
3Jack2007-05-06
3Jack2007-04-06
4Jill2007-04-06
5Zara2007-06-06
5Zara2007-02-06

7 rows in set (0.00 sec)

```
mysql> select 'Numeric Function';
```

Numeric Function
Numeric Function

1 row in set (0.00 sec)

```
mysql> SELECT ABS(2);
```

ABS(2)
2

1 row in set (0.00 sec)

```
mysql> SELECT ABS(-2);
```

ABS(-2)
2

1 row in set (0.00 sec)

```
mysql> SELECT ACOS(1);
```

ACOS(1)
0

1 row in set (0.01 sec)

```
mysql> SELECT ASIN(1);
```

ASIN(1)

```
| ASIN(1) |
+-----+
| 1.5707963267948966 |
+-----+
1 row in set (0.00 sec)
```

```
mysql> select 'BIT_AND(expression)';
+-----+
| BIT_AND(expression) |
+-----+
| BIT_AND(expression) |
+-----+
1 row in set (0.00 sec)
```

```
mysql> SELECT
-> MAKER, BIT_AND(PRICE) BITS
-> FROM CARS GROUP BY MAKER
-> SELECT
-> MAKER, BIT_AND(PRICE) BITS
-> FROM CARS GROUP BY MAKER
-> SELECT
-> MAKER, BIT_AND(PRICE) BITS
-> FROM CARS GROUP BY MAKER ;
```

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 'SELECT

```
MAKER, BIT_AND(PRICE) BITS
FROM CARS GROUP BY MAKE' at line 4
```

```
mysql> SELECT
-> BIT_COUNT(2) AS TWO,
-> BIT_COUNT(4) AS FOUR,
-> BIT_COUNT(7) AS SEVEN
-> SELECT CEILING(3.46);
```

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 'SELECT CEILING(3.46)' at line 5

```
mysql> notee;
```