

Date and Time

```
mysql> use mysql;
```

Database changed

select sysdate()--It returns the date and time of current working system.

```
mysql> select sysdate();
```

sysdate()
2023-06-30 11:39:41

1 row in set (0.00 sec)

```
mysql> select sysdate();
```

sysdate()
2023-06-30 11:41:17

1 row in set (0.00 sec)

select now()--It returns the current working date and time.

```
mysql> select now();
```

now()
2023-06-30 11:42:52

1 row in set (0.00 sec)

select date()--it returns the specified date.

```
mysql> select date("2023-06-30");
```

date("2023-06-30")
2023-06-30

1 row in set (0.00 sec)

select month()--It returns the sequence number of the month in a year.

```
mysql> select date("2022-04-23");
```

date("2022-04-23")

2022-04-23

1 row in set (0.00 sec)

select month()--It returns the sequence number of the month in a year.

```
mysql> select month("2023-06-30");
```

month("2023-06-30")

6

1 row in set (0.00 sec)



select monthname()--It return the name(label) of the month.

```
mysql> select monthname("2023-06-30");
```

monthname("2023-06-30")

June

1 row in set (0.00 sec)

select year()--It returns the number of the year.

```
mysql> select year("2023-06-30");
```

year("2023-06-30")

2023

1 row in set (0.00 sec)

select quarter()--A year has total 4 quarters. Each Quarter has 3 months. In Increasing order of the months the quarter increase by 1 after shifting 3 months ahead.

```
mysql> select quarter("2023-01-12");
```

quarter("2023-01-12")

1

1 row in set (0.00 sec)

```
mysql> select quarter("2023-02-12");
```

quarter("2023-02-12")

1

1 row in set (0.00 sec)

```
mysql> select quarter("2023-03-12");
```

quarter("2023-03-12")
1

1 row in set (0.00 sec)

```
mysql> select quarter("2023-04-12");
```

quarter("2023-04-12")
2

1 row in set (0.00 sec)

```
mysql> select quarter("2023-06-12");
```

quarter("2023-06-12")
2

1 row in set (0.00 sec)

```
mysql> select quarter("2023-12-12");
```

quarter("2023-12-12")
4

1 row in set (0.00 sec)

select microseconds()--It returns the microseconds from the specified time.

```
mysql> select microsecond("2023-06-30 11:56:40.547812");
```

microsecond("2023-06-30 11:56:40.547812")
547812

1 row in set (0.00 sec)

```
mysql> select microsecond("2023-06-30 11:56:40.54781");
```

microsecond("2023-06-30 11:56:40.54781")

547810

1 row in set (0.00 sec)

```
mysql> select microsecond("2023-06-30 11:56:40.5478");
```

microsecond("2023-06-30 11:56:40.5478")
--

547800

1 row in set (0.00 sec)

```
mysql> select microsecond("2023-06-30 11:56:40.5");
```

microsecond("2023-06-30 11:56:40.5")

500000

1 row in set (0.00 sec)



```
mysql> select microsecond("2023-06-30 11:56:40.9");
```

microsecond("2023-06-30 11:56:40.9")

900000

1 row in set (0.00 sec)

```
mysql> select microsecond("2023-06-30 11:56:40.9999999999");
```

microsecond("2023-06-30 11:56:40.9999999999")
--

0

1 row in set (0.00 sec)



```
mysql> select microsecond("2023-06-30 11:56:40.999999");
```

microsecond("2023-06-30 11:56:40.999999")
--

999999

1 row in set (0.00 sec)

```
mysql> select microsecond("2023-06-30 11:56:40.9");
```

 microsecond("2023-06-30 11:56:40.9")

900000

1 row in set (0.00 sec)

```
mysql> select microsecond("2023-06-30 11:56:40.000000");
```

2023-06-30 11:56:40.000000

0

1 row in set (0.00 sec)



```
mysql> select microseconds("2023-06-30 11:56:40.000000");
```

ERROR 1305 (42000): FUNCTION mysql.microseconds does not exist

```
mysql> select microsecond("2023-06-30 11:56:40.000000");
```

microsecond("2023-06-30 11:56:40.000000")
--

0

1 row in set (0.00 sec)



select dayofmonth()--It returns the sequence of the day in the month.

```
mysql> select dayofmonth("2023-06-30");
```

dayofmonth("2023-06-30")
30

1 row in set (0.00 sec)

select dayname()--It returns the name of the day from within 7 days of the week.

```
mysql> select dayname("2023-06-30");
```

dayname("2023-06-30")
Friday

1 row in set (0.00 sec)

select dayofweek()--It returns the sequence number of the day within a week.

```
mysql> select dayofweek("2023-06-30");
```

dayofweek("2023-06-30")
6

1 row in set (0.00 sec)

select dayofyear()--It returns the sequence number of the day within a year among 365 days

```
mysql> select dayofyear("2023-06-30");
```

dayofyear("2023-06-30")
181

1 row in set (0.00 sec)

select week()--It returns the sequence number of the week within a year among the total weeks in a year

```
mysql> select week("2023-06-30");
```

week("2023-06-30")
26

1 row in set (0.00 sec)

```
mysql> select week("2023-12-31");
```

week("2023-12-31")
53

1 row in set (0.00 sec)

select yearweek()--It returns the number of the year along with It returns the sequence number of the week within a year among the total weeks in a year.

```
mysql> select yearweek("2023-06-30");
```

yearweek("2023-06-30")

202326

1 row in set (0.00 sec)

```
mysql> select last_day("2023-06-30");
```

last_day("2023-06-30")

2023-06-30

1 row in set (0.00 sec)

select last_day()--It Returns the last day of the month.

```
mysql> select last_day("2023-06-30");
```

last_day("2023-06-30")
2023-06-30

1 row in set (0.00 sec)

extract function require from keyword in order to extract data from the targeted date.

```
mysql> select extract(year_month from("2023-06-30"));
```

extract(year_month from("2023-06-30"))
202306

1 row in set (0.00 sec)

select extract(year_month from("Specified Date"))--It returns the number of the year,It returns the sequence number of the month in a year.

select extract(week from("Specified Date"))--It returns the sequence number of the week within a year among the total weeks in a year

mysql> select **extract**(week **from**("2023-06-30"));

extract(week from("2023-06-30"))

26

1 row in set (0.00 sec)

select extract(month from("Specified Date"))--It returns the sequence number of the month in a year.

mysql> select **extract**(month **from**("2023-06-30"));

extract(month from("2023-06-30"))
--

6



1 row in set (0.00 sec)

select extract(year from("Specified Date"))--It returns the number of the year.

mysql> select **extract**(year **from**("2023-06-30"));

extract(year from("2023-06-30"))
2023

1 row in set (0.00 sec)

select extract(day from("Specified Date"))--It returns the sequence number of the day within the month.

mysql> select **extract**(day **from**("2023-06-30"));

extract(day from("2023-06-30"))
30

1 row in set (0.00 sec)



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select extract(hour from("Specified Date"))--It returns the hour value from the specified time.

mysql> select **extract**(hour **from**("2023-06-30 12:34:50"));

extract(hour from("2023-06-30 12:34:50"))
--

12

1 row in set (0.00 sec)

mysql> select **extract**(hour **from**("2023-06-30 23:34:50"));

extract(hour from("2023-06-30 23:34:50"))
--

23

1 row in set (0.00 sec)



select extract(minute from("Specified Time"))--It returns the minute from the specified time.

mysql> select **extract**(minute **from**("2023-06-30 12:36:44"));

```
extract(minute from('2023-06-30 12:36:44'))
```

```
36
```

1 row in set (0.00 sec)

select extract(second from("Specified Time"))--It returns the seconds from the specified time.

mysql> select **extract**(second **from**("2023-06-30 12:36:44"));

```
extract(second from('2023-06-30 12:36:44'))
```

```
44
```

1 row in set (0.00 sec)

select extract(microsecond from("Specified Time"))--It returns the microseconds from the specified time.

```
mysql> select extract(microsecond from("2023-06-30  
12:38:50.999999"));
```

extract(microsecond from("2023-06-30 12:38:50.999999"))
999999

1 row in set (0.00 sec)

```
mysql> select extract(microsecond from("2023-06-30  
12:38:50.99999999"));
```

extract(microsecond from("2023-06-30 12:38:50.99999999"))
0

1 row in set (0.00 sec)

select curtime()--It returns the current time of the system.

```
mysql> select curtime();
```

curtime()
12:40:23

1 row in set (0.00 sec)

select curtime(FSP)--FSP stands for fractional seconds parts. It specifies the number of digits of micro-seconds that are to be displayed. Maximum FSP is 6 and Minimum is 0.

Microseconds are only visible in curtime() only when the FSP is Specified.

```
mysql> select curtime(0);
```

curtime(0)
12:42:25

1 row in set (0.00 sec)

```
mysql> select curtime(4);
```

curtime(4)
12:42:36.0577

1 row in set (0.00 sec)

```
mysql> select curtime(6);
```

curtime(6)
12:43:26.519682

1 row in set (0.00 sec)

```
mysql> select curtime(8);
```

**ERROR 1426 (42000): Too-big precision 8 specified for 'curtime'.
Maximum is 6.**

```
mysql> select curtime();
```

curtime()
12:45:00

1 row in set (0.00 sec)



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9075127693,
7028578967.