

## String functions

Trim	Removes extra spaces from both side of the string	Select trim(" Hello ") Hello
Rtrim	Removes extra spaces from right side of the string	Select rtrim(" Hello ") Hello
Ltrim	Removes extra spaces from left side of the string	Select ltrim(" Hello ") Hello
Instr	It will find the position of the given string if string exists. Otherwise gives 0	Select instr('welcome','lc'); 3 Select instr('welcome','la'); 0
replace	It will replace all occurrences of the given string with second string	Select replace('welcome lovely','l','x'); Wexcome xovexy ---- all pccurances of l will get replaced by x
Length	It will find how many characters are there in the given string	Select length('Welcome'); ----7
Format	It will display thousand separator in number, and also decide how many decimal places after .	Select format(12345,2) 12,345.00

To insert a record

insert into emp values(123,'Rajan','Designer',7902,'2017-01-01',34567,3456,10);

To find employees who joined 5 years back

Select \*

From emp

Where year(hiredate)=year(curdate())-5;

## Date functions

year	To retrieve year portion from date	Select year(curdate())----- 2022
month	To retrieve only month from date	Select month(curdate())-----10
day	To retrieve date from current date	Selec t day(curdate())

extract	To retrieve required part of date	Select extract(month from curdate()) Select extract(year from curdate()) Select extract(day from curdate())
datediff	To find difference between 2 dates in the form of days	Select datediff(curdate(),'2021-10-30')
Date_add	To find date after one day or week or month or year	SELECT '2015-01-01' start, DATE_ADD('2015-01-01', INTERVAL 1 DAY) 'one day later', DATE_ADD('2015-01-01', INTERVAL 1 WEEK) 'one week later', DATE_ADD('2015-01-01', INTERVAL 1 MONTH) 'one month later', DATE_ADD('2015-01-01', INTERVAL 1 YEAR) 'one year later';
Date_sub	To find date before one day or week or month or year	SELECT '2015-01-01' start, DATE_sub('2015-01-01', INTERVAL 1 DAY) 'one day later', DATE_sub('2015-01-01', INTERVAL 1 WEEK) 'one week later', DATE_sub('2015-01-01', INTERVAL 1 MONTH) 'one month later', DATE_sub('2015-01-01', INTERVAL 1 YEAR) 'one year later';
Week	Find the week out of 52	Select week(curdate())
Quarter	Find quarter of the date	Select quarter(curdate())

1. Find all medicines which are expiring within 4 months

Select \*

From medicine

Where expdate between curdate()+5 and date\_add(curdate(),interval 4 months);

2. Find all products manufactured within these 4 months.

Select \*

From products

Where mfgdate between date\_sub(curdate(),interval 4 months) and curdate();

3. Find date which is after 2 years 6 months 3 days

Select date\_add(date\_add(date\_add(curdate(),interval 2 years),interval 6 month),interval 3 days)

4. Find all employees who joined in feb 1980 or feb 1981

Select \*

From emp

Where year(hiredate) in (1980,1981) and month(hiredate)=2;

1. To format a date value, you use DATE\_FORMAT function. The following statement formats the date as mm/dd/yyyy using the date format pattern %m/%d/%Y :

```
SELECT DATE_FORMAT(CURDATE(), '%m/%d/%Y') today;
```

```
+-----+
```

```
| today  |
```

```
+-----+
```

```
| 07/13/2015 |
```

```
+-----+
```

1 row in set (0.02 sec)

```
SELECT DATE_FORMAT(CURDATE(), '%M, %D %y') today; ----- y will show 2 digit year
```

Y --- will display 4 digit year

y---will display 2 digit year

M- month name in character

m-month in number

d- date in number

D- display th or st after date

```
+-----+
```

```
| today      |
```

```
+-----+
```

```
| September, 21st 18 |
```

```
+-----+
```

```
select monthname(curdate());
```

```
+-----+
```

```
| monthname(curdate()) |
```

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

```
mysql> select dayname(curdate());
```

```
+-----+
| dayname(curdate()) |
+-----+
| Friday             |
+-----+
1 row in set (0.00 sec)
```

```
----to find unique values of jobs in emp table
Select distinct job
From emp;
```

## To find nth Highest record

```
----- to find 8th highest salary:
```

```
SELECT DISTINCT Salary FROM emp ORDER BY Salary DESC LIMIT 7,1
```

```
-----to find first 10 rows
```

```
Select *
```

```
from emp
```

```
limit 10;
```

```
-----to find rows starting from 3 rd onward 7 rows (counting starts with 0)
```

```
Select *
```

```
from emp
```

```
limit 3,7
```

Aggregate functions

When we want to calculate aggregate values for group of rows then we use these functions

Sum, avg, min,max,count

Count(\*) will count all rows

Count(sal) will count only not null values in sal column

Count(comm) will count only not null values in comm column

For these functions group by and having clause

1. Find sum and avg of sal and netsal for each job

```
Select job,sum(sal),avg(sal),sum(sal+ifnull(comm,0)),avg(sum+ifnull(comm,0))
```

```
From emp
```

```
Group by job
```

```
Order by job;
```

2. Find how many analysts are there in each department

```
Select deptno,count(*)
```

```
From emp
```

```
Where job=analyst
```

```
Group by deptno;
```

3. Find sum , average of salary for all employees whose sal> 1500 departmentwise;

```
Select deptno,sum(sal),avg(sal)
```

```
From emp
```

```
Where sal > 1500
```

```
Group by deptno;
```