8 days:

**Day 8**

**Database:**

**MySQL :**

MySQL function : function is use to write the set of instruction to perform a specific task.

My SQL provided different types of function. Mainly divided into 2 types.

1. pre defined function
2. user defined function (PL SQL).

**Pre defined or built in function**

Mainly divided into 2 types.

1. Single row functions

The function functionality apply for each record individually.

String function

Upper

Lower

Substring

Concat

Length

Etc

**select pname,upper(pname) as upperCase, lower(pname) as lowerCase,substring(pname,2,5) substring from product;**

**select length('welcome to mysql trainining');**

Number function

select abs(-10);

select round(56000.4678,3);

select round(56000.4678,2);

select round(56000.4678,1);

select round(56000.4678,0);

select truncate(56000.4678,3);

select truncate(56000.4678,2);

select truncate(56000.4678,1);

select truncate(56000.4678,0);

Date function

Now() this display current date and time

curDate() this display date

curtime() this display time

date\_format(date,format):

select date\_format(now(),'%d-%m-%Y');

select date\_format(now(),'%d-%m-%Y %h:%i:%s');

datediff(): this function display number of days between two dates

select datediff('2025-06-01','2025-04-01');

select datediff(now(),'2025-04-01');

employee table contains hire\_date.

Please take the help of datediff function and display first\_name and hire\_date in dd-mm-yyyy format of only those employee whose experience is > 30 year.

select upper(first\_name) employee\_name,date\_format(hire\_date,'%d-%M-%Y') hire\_date,round(datediff(now(),hire\_date)/365,0) yearOfExp from employee;

<https://dev.mysql.com/doc/refman/8.4/en/built-in-function-reference.html>

**Multi row function or aggregate function**

These function functionalities apply for more than one records using group concept. By default whole table consider as one group. Using group by clause we can make sub group.

sum()

max()

min()

avg()

count()

select sum(salary) as total\_salary from employee;

select max(salary) as max\_salary from employee;

select min(salary) as min\_salary from employee;

select avg(salary) as avg\_salary from employee;

select count(salary) as total\_number\_of\_Employee from employee;

count function can ignore null value.

While using count function better pass the column name which contains pk or \*.

select count(\*) as total\_number\_of\_Employee from employee;

**group by clause**

select sum(salary) from employee group by department\_id;

select department\_id,sum(salary) from employee group by department\_id;

select manager\_id,count(\*) from employee group by manager\_id;

1. Multi row functions