**Pre-define Functions**

select sysdate();

select date\_format(sysdate(),'%y-%m-%d')as today;

select date\_format(sysdate(),'%d-%m-%y') as today\_ind;

new value--> insert/update-->

old===>Existing==>

**Functions:**

**Example-01**

delimiter $$

create function f\_emp\_avg\_sal11(p\_emp\_no integer) returns decimal(10,2)

DETERMINISTIC NO SQL reads sql data

begin

declare v\_avg\_sal decimal(10,2);

select avg(s.salary) into v\_avg\_sal from employees e

join

salaries s on e.emp\_no = s.emp\_no

where e.emp\_no = p\_emp\_no;

return v\_avg\_sal;

end$$

delimiter ;

select f\_emp\_avg\_sal11(11300);

**Example-02:**

DELIMITER $$

CREATE FUNCTION emp\_info(p\_first\_name varchar(255), p\_last\_name varchar(255)) RETURNS decimal(10,2)

DETERMINISTIC NO SQL READS SQL DATA

BEGIN

DECLARE v\_max\_from\_date date;

DECLARE v\_salary decimal(10,2);

SELECT

MAX(from\_date)

INTO v\_max\_from\_date FROM

employees e

JOIN

salaries s ON e.emp\_no = s.emp\_no

WHERE

e.first\_name = p\_first\_name

AND e.last\_name = p\_last\_name;

SELECT

s.salary

INTO v\_salary FROM

employees e

JOIN

salaries s ON e.emp\_no = s.emp\_no

WHERE

e.first\_name = p\_first\_name

AND e.last\_name = p\_last\_name

AND s.from\_date = v\_max\_from\_date;

RETURN v\_salary;

END$$

DELIMITER ;

select \* from employees limit 10;

select emp\_info('Sumant','Peac');

**Triggers:**

use employees;

commit;

# Before Insert

delimiter $$

create trigger before\_sal\_insert

before insert on salaries

for each row

begin

if new.salary < 0 then

set new.salary = 0;

end if;

end$$

delimiter ;

select \* from salaries where emp\_no=10002;

insert into salaries values('10002',-92891,'2010-06-22','9999-01-01');

select \* from salaries where emp\_no=10002;

drop trigger before\_sal\_insert;

**Example\_02:**

delimiter $$

create trigger before\_sal\_update

before update on salaries

for each row

begin

if new.salary <0 then

set new.salary = old.salary;

end if;

end$$

delimiter ;

update salaries set salary = 98765 where emp\_no='10001' and from\_date = '2010-06-22';

select \* from salaries where emp\_no='10001' and from\_date = '2010-06-22';

update salaries set salary = -50000 where emp\_no = '10001' and from\_date='2010-06-22';

select \* from salaries where emp\_no = '10001' and from\_date = '2010-06-22';

update salaries set salary = 99765 where emp\_no='10001' and from\_date = '2010-06-22';

select \* from salaries where emp\_no='10001' and from\_date = '2010-06-22';

update salaries set salary = -50000 where emp\_no = '10001' and from\_date='2010-06-22';

select \* from salaries where emp\_no = '10001' and from\_date = '2010-06-22';

**# To display the SQL Engines**

show engines;