**While Loop**

To Print Multiple Values in 1 time

* Stytax

WHILE condition

BEGIN

-- SQL statements to be executed repeatedly

END

**Example : 1** Print 10 number

declare @x int = 1;

declare @counter int = 10;

while @x < @counter

begin

Print @x;

set @x = @x+1;

end

**Example : 2 (Scalar Function) which take n# and Print table**

create function dbo.CreateTable(@tableNumber int)

returns varchar(250)

begin

declare @x int = 1;

declare @counter int = 10;

--declare @tableNumber int = 2;

declare @return varchar(250) = '';

while @x <= @counter

begin

--Print convert(varchar(25) , @tableNumber) + ' \* ' + convert(varchar(25) , @x )+ ' = ' + convert(varchar(25) , @x \* @tableNumber );

set @return = @return + convert(varchar(25) , @tableNumber) + ' \* ' + convert(varchar(25) , @x )+ ' = ' + convert(varchar(25) , @x \* @tableNumber )+ CHAR(10);

set @x = @x+1;

end

return @return;

end

SELECT dbo.CreateTable(2);

**Example : 3 (Table Valued Function) which take n# and Print table**

create FUNCTION dbo.CreateTables(@tableNumber int)

RETURNS TABLE

AS

RETURN

(

SELECT

RowNum = ROW\_NUMBER() OVER (ORDER BY number) + 1,

Mutiples = CONVERT(varchar(10), @tableNumber) + ' \* ' + CONVERT(varchar(10), number) + ' =' + convert(varchar(25),@tableNumber \* number)

FROM

master.dbo.spt\_values

WHERE

type = 'P' AND

number BETWEEN 1 AND 10

)

SELECT \*

FROM dbo.CreateTables(2);

**Example : 4 update table -> if condition**

CREATE TABLE Sales (

Year INT,

Quarter INT,

Amount DECIMAL(10,2)

);

INSERT INTO Sales (Year, Quarter, Amount)

VALUES (2021, 1, 10000.00),

(2021, 2, 15000.00),

(2021, 3, 20000.00),

(2021, 4, 25000.00),

(2022, 1, 30000.00),

(2022, 2, 35000.00),

(2022, 3, 40000.00),

(2022, 4, 45000.00);

--\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ While loop \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

declare @counter int;

set @counter = 1;

while @counter <= (select Count(\*) from Sales where Year = 2022)

Begin

Update Sales

Set Amount = Amount \* 1.1

Where Year = 2022;

--\_\_ loop Incrementer \_\_

set @counter = @counter +1;

end

--\_\_\_\_\_\_\_\_\_ check Updated Records \_\_\_\_\_\_\_\_\_\_\_

select \* from Sales

**Example : 5 function + update table -> if condition**