create table table1(

id int not null identity(1,1),

email varchar(50),

number char(10)

)

insert into table1

select 'abc1@gmail.com','ghgttt'

union select 'abc2@gmail.com','1234567890'

union select 'abc3@gmail.com','1234567891'

union select 'abc4@gmail.com','1234567892'

union select 'abc5@gmail.com','1234567893'

union select 'abc6@gmail.com','12347894'

union select 'abD6@gmail.com','123494'

union select 'abF6@gmail.com','12344'

union select 'abTT6@gmail.com','1234'

select \* from table1

select STUFF(email,2,CHARINDEX('@',email)-1,'\*\*\*\*')as value from table1

select \* from EMPLOYEE

select top 1 salary from (select distinct top 5 salary from EMPLOYEE order by salary desc ) as value123

order by salary

select \* from EMPLOYEE

go

with cte

as

(

select name,DEPARTMENT.Dept\_details, salary,DENSE\_RANK() over (partition by EMPLOYEE.dept\_id order by salary desc) AS dr

from EMPLOYEE inner join DEPARTMENT

on EMPLOYEE.DEPT\_ID=DEPARTMENT.DEPT\_ID

)

select \* from cte where dr = 1

select email, REPLACE(number,' ','') from table1

select email, LTRIM(RTRIM(number)) as num from table1

abTT6@gmail.com 1234

select \*, SUBSTRING(email,1,CHARINDEX('@',email)-1) as value from table1

select \*, CHARINDEX('@',email), left(email, CHARINDEX('@',email) - 1) as value from table1

Alter table table1

add isNum as isnumeric(number)

a b c

1 3 4

2 5 7

create table table2(

a int,

b int,

c as a+b

)

go

insert into table2 select 1,4

union select 5,11

select \* from table2

CREATE TABLE RandomNumbers (

ID INT IDENTITY(1,1) PRIMARY KEY,

Number INT NOT NULL,

InsertedAt DATETIME DEFAULT GETDATE(),

loopNum int,

);

alter table RandomNumbers alter column Number char(5)

go

alter PROCEDURE InsertNum

AS

BEGIN

declare @cur\_time datetime,@end\_time datetime;

SET @end\_time = dateadd(HOUR, 2, getdate());

declare @loopNum INT;

SET @loopNum=1;

WHILE 1 = 1

BEGIN

SET @cur\_time =GETDATE()

DECLARE @RandomNumber INT,@innerloopnum INT;

DECLARE @RandomChar CHAR(9);

SET @innerloopnum=1;

while @innerloopnum<=100

BEGIN

SET @RandomNumber = FLOOR(RAND() \* 100000);

SET @RandomChar =RIGHT(rtrim('0000'+ CAST(@RandomNumber AS CHAR(5))),5);

IF NOT EXISTS (SELECT 1 FROM RandomNumbers WHERE Number = @RandomChar)

BEGIN

INSERT INTO RandomNumbers (Number,loopNum)

values( @RandomChar,@loopNum)

END

SET @innerloopnum+=1;

END

IF(@cur\_time>@end\_time)

BEGIN

BREAK;

END

SET @loopNum+=1;

WAITFOR DELAY '00:02:00';

    END

END;

go

DECLARE @RandomNumber INT,@RandomChar char(8);

SET @RandomNumber =FLOOR(RAND() \* 10000);

SET @RandomChar =RIGHT(rtrim('000'+ CAST(@RandomNumber AS CHAR(4))),4);

select @RandomChar

truncate table randomNumbers

EXEC InsertNum;

Create table Employees

(

     ID int primary key identity,

     FirstName nvarchar(50),

     LastName nvarchar(50),

     Gender nvarchar(50),

     Salary int

)

GO

Insert into Employees values ('Ben', 'Hoskins', 'Male', 70000)

Insert into Employees values ('Mark', 'Hastings', 'Male', 60000)

Insert into Employees values ('Steve', 'Pound', 'Male', 45000)

Insert into Employees values ('Ben', 'Hoskins', 'Male', 70000)

Insert into Employees values ('Philip', 'Hastings', 'Male', 45000)

Insert into Employees values ('Mary', 'Lambeth', 'Female', 30000)

Insert into Employees values ('Valarie', 'Vikings', 'Female', 35000)

Insert into Employees values ('John', 'Stanmore', 'Male', 80000)

GO

To find the highest salary it is straight forward. We can simply use the **Max**() function as shown below.

Select Max(Salary) from Employees

To get the **second highest salary**use a **sub query**along with **Max()**function as shown below.

Select Max(Salary) from Employees where Salary < (Select Max(Salary) from Employees)

**To find nth highest salary using Sub-Query**

SELECT TOP 1 SALARY

FROM (

      SELECT DISTINCT TOP N SALARY

      FROM EMPLOYEES

      ORDER BY SALARY DESC

      ) RESULT

ORDER BY SALARY

**--To find nth highest salary using CTE**

WITH RESULT AS

(

    SELECT SALARY,

           DENSE\_RANK() OVER (ORDER BY SALARY DESC) AS DENSERANK

    FROM EMPLOYEES

)

SELECT TOP 1 SALARY

FROM RESULT

WHERE DENSERANK = N

--delete duplicates

WITH EmployeesCTE AS

(

   SELECT \*, ROW\_NUMBER()OVER(PARTITION BY ID ORDER BY ID) AS RowNumber

   FROM Employees

)

DELETE FROM EmployeesCTE WHERE RowNumber > 1