1)--Find the records where Vals have more than 2 dots.

CREATE TABLE assgn3\_1(ID INT,Vals VARCHAR(100));

INSERT INTO assgn3\_1 VALUES (1,'0.0'),(2,'2.3.1.1'),(3,'4.1.a.3.9'),(4,'1.1.'),(5,'a.b.b.b.b.b..b..b'),(6,'6.');

select \* from assgn3\_1 where len(Vals)-len(replace(Vals,'.',''))>2;

2)--handling nulls

CREATE TABLE HandleNulls(Id VARCHAR(10),Nr VARCHAR(10),Code VARCHAR(10));

INSERT INTO HandleNulls VALUES('a','a','a' ),('a','a' ,NULL ),('a',NULL,NULL ),('a','a' ,'b' ),(NULL,NULL,'b' ),(NULL,'a','b' ),(NULL,NULL,NULL);

select concat(id,

case when isnull(id,'')='' or isnull(nr,'')='' then '' else '-' end,nr,

case when isnull(code,'')='' or isnull(nr,'')='' then '' else '-' end,

case when isnull(id,'')='' and isnull(nr,'')='' and isnull(code,'')='' then 'NULL' else code end) from HandleNulls ;

--OR

select stuff(isnull('-'+id,'')+isnull('-'+nr,'')+isnull('-'+code,''),1,1,'') from HandleNulls

3) /\*You are getting a file into a folder everyday with names like File\_SQL\_Test\_02022018.txt every day. Date is appended at the end.

Write a SQL query which gives the date in DD/MM/YYYY format when the filename is passed as variable.\*/

declare @c varchar(30)='File\_SQL\_Test\_02022018.txt';

declare @d varchar(30);

declare @e date;

set @d=substring(@c,patindex('%[0-9][0-9][0-9][0-9][0-9][0-9][0-9][0-9]%',@c),8);

set @e= concat(substring(@d,1,2),'/',substring(@d,3,2),'/',substring(@d,5,4));

select format(@e,'d','en-gb');

4)/\* Get the required output

Sample Input

ID Name Typed

1 P NULL

1 NULL Q

Expected Output

Id Name Typed

1 P Q \*/

select max(id)as id,max(name) as name,max(typed) as typed from assgn3\_4 group by id

--OR

select distinct id,ISNULL(a1.name,a2.name)as name,ISNULL(a1.typed,a2.typed) as typed from assgn3\_4 a1 join assgn3\_4 a2 on a1.id=a2.id and (a1.name is null or a2.name is null) and(a1.typed is null or a2.typed is null)

--OR

select distinct \* from (select h2.id as id,coalesce(h1.name,h2.name)as name,coalesce(h1.typed,h2.typed) as typed

from assgn3\_4 h1 , assgn3\_4 h2 where h1.id=h2.id )as d where name is not null and typed is not null

/\*your query is wrong even though it gives correct result. Why do you use max on grouped column???

\*/

5)--Write a query to delete the duplicate records in the table

select distinct \* into new from assgn3\_5;

drop table assgn3\_5 ;

exec sp\_rename 'new', 'assgn3\_5' ;

select \* from assgn3\_5;

--OR

create table assign3\_5(id smallint,val smallint)

insert into assign3\_5 values(1,1),(2,1),(3,2),(4,2),(5,3),(6,4),(7,5),(8,5)

delete a1 from assign3\_5 a1 join assign3\_5 a2 on a1.val=a2.val and a1.id<a2.id

/\*you should not do that way. You wont have permissions to do DDL operations on table. Wrong. Try using delete statement\*/

6) /\*Get the word with sounds most like 'Assignment' from below words

a) refinement

b) treatment

c) reignment \*/

declare @p int;

declare @q int;

declare @r int;

declare @compare int=cast(substring(SOUNDEX ('assignment'),2,3) as int);

set @p=abs(cast(substring(SOUNDEX ('refinement'),2,3) as int) - @compare);

set @q=abs(cast(substring(SOUNDEX ('treatment'),2,3) as int) - @compare);

set @r=abs(cast(substring(SOUNDEX ('reignment'),2,3) as int) - @compare);

select case when @p <= @q And @p <= @r then 'refinement'

when @q <= @r then 'treatment'

else 'reignment'

end ;

--another way of doing this

declare @p int;

declare @q int;

declare @r int;

set @p=difference('assignment','refinement');

set @q=difference('assignment','treatment');

set @r=difference('assignment','reignment');

select case when @p >= @q And @p >= @r then 'refinement'

when @q >= @r then 'treatment'

else 'reignment'

end;

7) /\* Given the below strings

'www.sqlautority.com'

'https://ggku2ser14:8000'

'www.brentozar.com' \*/

declare @a varchar(30)='www.brentozar.com';

select case when @a like 'www.%' then 'website\_'+substring(@a,5,len(@a)-8) else

case when @a like 'https://%' then 'localserver\_'+substring(@a,9,len(@a)-13) end end;

8)-- A script for finding numbers in a string. (for example: if string is '9fghjk8fghj66rt5', print 9,8,6,5)

declare @b varchar(20)='9fghjk8fghj66rt5';

declare @c int;

declare @d varchar(10)='';

declare @i int=1;

while(@i<=len(@b))

begin

set @c=patindex('%[0-9]%',substring(@b,@i,1))

if(@c=1 and @i<len(@b))

set @d=@d+substring(@b,@i,1)+',';

else if(@c=1)

set @d=@d+substring(@b,@i,1);

set @i=@i+1;

end;

select @d;