TOC does not work

Create a view. This is confusing because it does not use begin/end whereas stored procs do

create view bong

as

select \* FROM dbo.[201811]

union all

select \* from dbo.[201812]

<https://stackoverflow.com/questions/9918117/creating-a-view-from-a-union-query>

if you want to build on this using params... it can be done but bear in mind the New Query… option may not show your newly created views. A refresh is often required.

Actually <https://stackoverflow.com/questions/1687279/can-we-pass-parameters-to-a-view-in-sql>  
its not possible in SQL server to create a parameterised view. Instead you need to create a procedure that calls the view and then returns a result set

CREATE PROCEDURE s\_emp

(

@pg2 nvarchar

)

AS

SELECT \* FROM bong WHERE productgroup=@pg2

it worked, but I cannot find s\_emp anywhere in the db. Running it again, says object already exists. Where FFS?

OK so instead use a FUNCTION.   
CREATE FUNCTION [dbo].[bongWParam]

(

@pPG2 nvarchar

)

RETURNS TABLE

AS

RETURN

(

SELECT \* FROM bong WHERE productgroup LIKE @pPG2

)

GO

These will appear in the functions lists and can be picked up by another view. But how do I list them? <https://stackoverflow.com/questions/15420235/sql-list-of-all-the-user-defined-functions-in-a-database> not easily.

Try again.

CREATE PROCEDURE bingWparam

-- Add the parameters for the stored procedure here

@pPG2 nvarchar

AS

BEGIN

-- SET NOCOUNT ON added to prevent extra result sets from

-- interfering with SELECT statements.

SET NOCOUNT ON;

-- Insert statements for procedure here

SELECT \* from dbo.bong WHERE ProductGroup like @pPG2

END

GO

SO YES, this works, and it looks like we can;

1/ create a view of union queries

2/ create a procedure of a view adding params

3/ create a view of the procedure? NO this does not work. So can you create one of a function?

create function usr\_qryTimeseriesFparam

(@pPG2 nvarchar(50))

returns table

as

return

(

SELECT \* FROM usr\_qryTimeSeries WHERE ProductGroup Like @pPG2

)

Yeah, that works. Can create. But means I have a challenge finding the function to modify it.

(@pPG2 nvarchar(50)=’%’) will set a default value

Next bit of fun is the cross tab queries

<https://stackoverflow.com/questions/13953134/convert-access-transform-pivot-query-to-sql-server>

CREATE view [dbo].[pear]

as

SELECT \*

FROM

(

SELECT

NASPID,

TypeOfCharge,

USDamount,

ProductGroup,

ChargePeriod

FROM usr\_qryTimeseries

) t

PIVOT (

SUM(USDAmount)

FOR ChargePeriod IN ([201901],[201902],[201903])

) p;

But SQLserver does not dynamically generate the column heads for you unlike MSAccess. In the above example, I asserted them manually.

MEANS: every time the charge periods change, we need to rebuild all queries including all pivots because we need to assert the new charge period string.

You can try and do it dynamically but the below won’t work in the editor

DECLARE @cols AS NVARCHAR(MAX);

DECLARE @query AS NVARCHAR(MAX);

SELECT @cols = STUFF((SELECT distinct

',' +

QUOTENAME(Period)

FROM usr\_qryTimeseries

FOR XML PATH(''), TYPE

).value('.', 'NVARCHAR(MAX)')

,1,1,'');

SET @query = ' SELECT Description, ' + @cols + '

FROM

(

SELECT

NASPID,

TypeOfCharge,

USDamount,

ProductGroup,

ChargePeriod

FROM usr\_qryTimeseries

) t

PIVOT

(

AVG(USDamount)

FOR ChargePeriod IN( ' + @cols + ')

) p ';

Execute(@query);

I think you have to use declare etc. in a function

<https://stackoverflow.com/questions/3475712/how-do-i-declare-the-scalar-variable-in-a-view-in-sql-server-2005>

<https://www.mssqltips.com/sqlservertip/2783/script-to-create-dynamic-pivot-queries-in-sql-server/>

<https://stackoverflow.com/questions/10404348/sql-server-dynamic-pivot-query>

Its just too freakin hard.

SO WE END UP HERE

CREATE function [dbo].qry\_usrNASP

(@pPG2 nvarchar(50),@pPG4 nvarchar(50),@pCustomer nvarchar(50),@pNASPID nvarchar(20))

returns table

as

return

SELECT \*

FROM

(

SELECT

NASPID,

ComanyNameInEnglish,

USDamount,

ChargePeriod

FROM usr\_qryTimeseriesWparam

) t

PIVOT (

SUM(USDAmount)

FOR ChargePeriod IN ([201901],[201902],[201903])

) p;

Try this

This works..

CREATE FUNCTION [dbo].qry\_usrNASP

(

-- Add the parameters for the function here

@pPG2 nvarchar(50) ,@pPG4 nvarchar(50),@pCustomer nvarchar(50),@pNASPID nvarchar(20)

)

RETURNS TABLE

AS

RETURN

(

SELECT \*

FROM

(

SELECT

NASPID,

CompanyNameInEnglish,

USDamount,

ChargePeriod

FROM usr\_qryTimeseriesWparam(@pPG2,@pPG4,@pCustomer,@pNASPID)

) t

PIVOT (

SUM(USDAmount)

FOR ChargePeriod IN ([201901],[201902],[201903])

) p

)

GO

And you can invoke it through a New Query script thus;

select \* from qry\_usrNASP('%','%','%','10GENE');

Note: you cannot use Order By in an SQL pivot query. Will need to do this at dataset level.

Note also that if you create a view/function that relies on another which does not yet exist, you hit an error. So create order is important. MS access had less of an issue here.

More examples, these were built as Procedures  
'https://stackoverflow.com/questions/1604091/update-a-table-using-join-in-sql-server

'UPDATE t1

'SET t1.CalculatedColumn = t2.[Calculated Column]

'From dbo.Table1 AS t1

'INNER Join dbo.Table2 AS t2

'On t1.CommonField = t2.[Common Field]

'WHERE t1.BatchNo = '110';

'UPDATE t1 SET t1.ProductGroup = [staticMapPG2PG4].[PG2], t1.Pg4mapped=[staticMapPG2PG4].[PG4] FROM 201801 AS t1 " INNER JOIN staticMapPG2PG4 AS t2 On (t1.CompanionProduct = t2.companionProduct) And (t1.BaseProduct = t2.BaseProduct) WHERE(t2.E2EiIndicator = False And t1.dtprocessed=@p1;")

'https://www.techonthenet.com/sql\_server/update.php

'\*\* 2019-04-18 tests

'update t

'set t.field2 = 'mouse'

'From tblTest t '\*\*\* t is an alias

'Where t.id = 1

'https://www.mssqltips.com/sqlservertip/2981/using-parameters-for-sql-server-queries-and-stored-procedures/

'\*\* end 2019-04-18 tests

'create procedure Proc3

'@sp varchar(25)

'as

'update t

'set t.field2='yay'

'From tbltest t

'Where t.field2 = @sp;

'the above works, now with a join...

'UPDATE a

'SET a.CalculatedColumn = b.[Calculated Column]

'From Table1 As a

'INNER Join Table2 AS b

'On a.CommonField = b.[Common Field]

'WHERE a.BatchNo = '110';

'CREATE PROCEDURE Proc4

'AS

'update a

'set a.Field2 = b.field3

'From tblTest a

'inner Join tblTest b 'b is an alias, do not use AS

'On a.Field2<>b.Field3

'go

' sSQL = String.Concat("UPDATE ", thisPeriod, " INNER JOIN staticMapPG2PG4 On ([", thisPeriod, "].CompanionProduct = staticMapPG2PG4.companionProduct) And ([", thisPeriod, "].BaseProduct = staticMapPG2PG4.BaseProduct) SET [", thisPeriod, "].ProductGroup = [staticMapPG2PG4].[PG2], [", thisPeriod, "].Pg4mapped=[staticMapPG2PG4].[PG4] WHERE(staticMapPG2PG4.E2EiIndicator = False AND [", thisPeriod, "].dtprocessed=#", isoDateStr, "#);")

'and with params?

'PROCEDURE [dbo].[Proc5]

'--Add the parameters for the stored procedure here

'@p1 varchar(25)

'AS

'BEGIN

'update a

'set a.Field2 = b.field3

'From tblTest a

'inner Join tblTest b

'On a.Field2<>b.Field3

'WHERE a.Field2 =@p1

'End

'READ THIS

'https://www.mssqltips.com/sqlservertip/2981/using-parameters-for-sql-server-queries-and-stored-procedures/

'says you can set up command text for direct SQL and then add params per normal. i.e. no need to define params in first part of

'sqlstatement

PIVOT and unPIVOT

This seems to be how you generate rowSums. The SQL fiddle site does run if you first convert to 2017 version. <https://stackoverflow.com/questions/13415540/sql-server-pivot-table-with-counts-and-sums>

See also <https://www.microsoftpressstore.com/articles/article.aspx?p=2233325&seqNum=4>

2020-02 group queries

<https://docs.microsoft.com/en-us/sql/t-sql/queries/select-group-by-transact-sql?view=sql-server-ver15>

SELECT Sum([USDAmount]) AS MRR,[ProductGroup]

FROM [PCManalytics].[dbo].[202001] GROUP BY [ProductGroup];

And in fact there are many $ against productGroup=”” rather than null.  
SELECT Sum([USDAmount]) AS MRR,[ProductGroup] ,[pg4mapped]

FROM [PCManalytics].[dbo].[202001] WHERE [Productgroup]='' GROUP BY [ProductGroup],[pg4mapped];

Note you can also use ROLLUP and CUBE to provide totalisers within these views. See the URL.

2021-06-21 return ID of row just inserted

here we use the OUTPUT keyword and then use ExecuteScalar rather than executeNonQuery

'https://stackoverflow.com/questions/42648/best-way-to-get-identity-of-inserted-row

Dim oCmd As New SqlCommand("INSERT INTO tblCustomer (DatePoint, planStatus) OUTPUT INSERTED.IDcustomer VALUES (@p1,'draft');", oConn)

'use executeScalar to pick up the returned IDcustomer

oCmd.Parameters.AddWithValue("@p1", Format(DateTime.UtcNow, "yyyy-MM-dd"))

oConn.Open()

target = oCmd.ExecuteScalar

oConn.Close()

more advanced version where we copy a record and modify a couple of fields and also return the new ID

Dim oCmd As New SqlCommand("INSERT INTO tblCustomer (DatePoint, planStatus,comment,[customerName],[listSpecifier],[costSpecifier],[trafficSpecifier]) OUTPUT INSERTED.IDcustomer

SELECT @p1,'draft','cloned', [customerName],[listSpecifier],[costSpecifier],[trafficSpecifier] FROM tblCustomer WHERE IDcustomer=@p2 ;", oConn)

2021-06-21 Use of the IN keyword

SQLserver syntax requires parenthesis and quote marks

fldOfInterest IN ('argentina','france')

2021-06-28 Referencial integrity

You first need to set up primary key fields, usually on the identity field in a table.

You then can edit relationships to set up the foreign key field (child) to primary key (parent) relationships.

https://www.sqlshack.com/commonly-used-sql-server-constraints-foreign-key-check-default/

https://www.google.com/search?q=sqlserver+alter+column+make+primary+key

https://docs.microsoft.com/en-us/sql/relational-databases/tables/create-foreign-key-relationships?view=sql-server-ver15

ALTER TABLE [dbo].[tblCustomer]  
 ADD CONSTRAINT FK\_tblCustomer\_IDlist FOREIGN KEY (IDlist)  
 REFERENCES [dbo].[tblList] (IDlist)  
 ON DELETE NO ACTION  
 ON UPDATE NO ACTION;

if you get it wrong, you can remove it with Drop. e.g. i needed no action rather than cascade. No action will block the delete/change

ALTER TABLE [dbo].[tblCustomer] DROP CONSTRAINT FK\_tblCustomer\_IDlist;  
note the underscores, hidden by word redlines

CHECK TABLE EXISTS

You need to pull info from information\_schema and look for the table  
https://www.tsql.info/ex/sql-check-if-table-exists.php

Dim oCmd As New SqlCommand("SELECT table\_name FROM INFORMATION\_SCHEMA.TABLES WHERE TABLE\_SCHEMA = 'dbo' AND TABLE\_NAME = @p1;", oconn)

oCmd.Parameters.AddWithValue("@p1", proj)

oconn.Open()

If oCmd.ExecuteScalar Is Nothing Then

statusBar.InnerText = "No data has been loaded for this project"

oconn.Close()

Return False

Else

NCHAR VS NVARCHAR AND FIELD PADDING WITH SPACES

NCHAR pads the field, NVARCHAR doesn't. But if the data is from the old field then the spaces will remain until trimmed.   
<https://stackoverflow.com/questions/5746143/why-are-values-stored-in-an-nvarchar-column-sometimes-padded-with-trailing-space>

PRIMARY KEY

If you forget to add a PK during table creation, you can add one later. E.g. IDproject is the PK on tblProject

ALTER TABLE [IDRanalytics].[dbo].[tblProject]

ADD CONSTRAINT PK\_tblProject\_IDproject PRIMARY KEY CLUSTERED (IDProject);

<https://docs.microsoft.com/en-us/sql/relational-databases/tables/create-primary-keys?view=sql-server-ver15>

SQL EXECUTE PRIVS

There is no global execute stored priv feature. But you can create this role.

CREATE ROLE db\_executor;

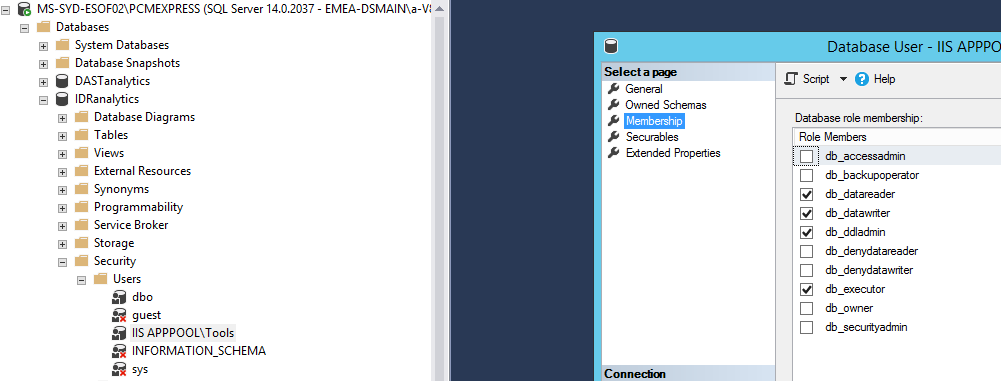
and then grant that role exec permission.

GRANT EXECUTE TO db\_executor;

Now when you go to the properties of the user and go to User Mapping and select the database where you have added new role, now new role will be visible in the Database role membership for: section. For more detail read full article

https://www.sqlmatters.com/Articles/Adding%20a%20db\_executor%20role.aspx

You need to add the application pool to the users and give this the db\_executor priv.



SQL EXAMPLE COLUMN MODIFY  
Often the MMSS won’t let you modify a column in the editor. Wants to drop and create.  
Below is an example where we increase the field size to 500. If the existing field was NOT NULL you need to add this attribute to the end.

USE [IDRanalytics]

GO

ALTER TABLE [tblproject] ALTER COLUMN [AllowedUsers] nvarchar(500)

next