

Function

100 %		
Results Messages		
	(No column name)	(No column name)
1	NULL	Yep, it is null
	(No column name)	(No column name)
1	Nope. It is not NULL	Nope. It is not NULL

Results Messages				
	vc_UserID	UserName	EmailAddress	UserDescription
1	20	ecstatic	blandit.enim.consequat@loremutaliquam.co.uk	Bandwidth series A financing niche market.
2	40	principle	ac.uma@miac.com	Business-to-business ecosystem ramen social media
3	24	metacarpal	et.magna.Praesent@placerataugueSed.org	Research & development startup long tail strategy c
4	43	canadian	Curabitur.dictum.Phasellus@eleifendnec.com	Agile development ownership business-to-consume
5	26	przewalski	amet@Maurismolestie.org	NULL
6	36	silly	accumsan@gravidasagittisDuis.net	Stock founders early adopters low hanging fruit A/E
7	7	wood	turpis.egestas.Fusce@massanonante.net	Technology investor marketing alpha.
8	11	doughnut	ipsum.primis@Cumsociis.com	Assets sales incubator user experience ecosystem
9	14	groggy	omare.ln.faucibus@egestas.ca	Sales niche market user experience investor social
10	47	these	parturient.montes@ipsum.ca	Entrepreneur virality freemium crowdsource long tai

Describe what lines 49 - 53: It's running the function we just created on lines 30 - 47 (named `vc_VidCastCount`, accepting `@userID` as parameters). Specifically, it's running the function 10 times, and then ordering by count of VidCasts.

How does the code know that `@userID 20` has 22 vidcasts? On line 51 in the SELECT statement, that's running the function created on lines 30 - 47 with `vc_UserID` as the `@userID` parameter. So we are inputting `@userID 20` into the function which then, when executed, counts the number of times that user ID is found in the `vc_VidCast` database.

Results		Messages	
	(No column name)		
1	4		

	(No column name)		
1	NULL		

Describe what lines 75 and 76: The function created on line 57 with the inputs 'Music' and 'Tunes'. Specifically, on line 66, the function runs a SELECT statement which selects the tagID from our vc_Tag db where the TagText = our input, in this case 'Music' or 'Tunes'.

Also, when line 76 executed, we received a NULL from SQL Server. How come? There are no tags with the text named 'Tunes'.

Results		Messages				
	vc_UserID	UserName	EmailAddress	UserDescription	WebSiteURL	UserRegisteredDate
1	20	ecstatic	blandit.enim.consequat@loremutaliquam.co.uk	Bandwidth series A financing niche market.	NULL	2017-11-16 00:00:00.0
2	40	principle	ac.uma@miac.com	Business-to-business ecosystem ramen social media...	http://principle.vidcast659.site	2017-11-01 12:14:24.0
3	24	metacarpal	et.magna.Praesent@placeraugaueSed.org	Research & development startup long tail strategy g...	http://metacarpal.vidcast659.site	2017-05-30 11:31:12.0
4	43	canadian	Curabitur.dictum.Phasellus@elefendnec.com	Agile development ownership business-to-consumer...	http://canadian.vidcast659.site	2017-06-27 05:16:48.0
5	26	przewalski	amet@Maurismolestie.org	NULL	http://przewalski.vidcast659.site	2017-02-11 08:52:48.0
6	36	silly	accumsan@gravidasagittisDuis.net	Stock founders early adopters low hanging fruit A/B...	http://silly.vidcast659.site	2017-05-25 14:38:24.0
7	7	wood	turpis.egestas.Fusce@massanonante.net	Technology investor marketing alpha.	http://wood.vidcast659.site	2017-06-21 15:36:00.0
8	11	doughnut	ipsum.primis@Cumsociis.com	Assets sales incubator user experience ecosystem ...	http://doughnut.vidcast659.site	2017-01-31 01:12:00.0
9	14	groggy	omare.In.faucibus@egestas.ca	Sales niche market user experience investor social ...	http://groggy.vidcast659.site	2017-04-20 09:50:24.0
10	47	these	parturient.montes@ipsum.ca	Entrepreneur virality freemium crowdsourcing long tail ...	http://these.vidcast659.site	2017-12-07 03:50:24.0

Describe what lines 79 through 87: Taking the select statement into a read-only view.

Results		Messages				
	vc_UserID	UserName	EmailAddress	UserDescription	WebSiteURL	UserRegisteredDate
1	6	tardy	kmstudent@syr.edu	Startup leverage growth hacking bootstrapping sc...	http://tardy.vidcast659.site	2017-03-12 15:36:00.000

Describe what lines 91 through 104: Creating a function that takes two parameters, the userName and the newEmail and runs an update where the userName = the userName parameter.

Results		Messages		
	vc_UserID	UserName	UserLoginTimestamp	LoginLocation
1	6	tardy	2021-03-09 21:05:51.607	localhost

Why is the UserLoginTimestamp value different from the lab document? Because the timestamp is recorded when the function is run, which for us is March 2021, but for the lab it's September 2020.

Simplify the code:

SELECT * from [dbo].[vc_AddUserLogin]('tardy', 'localhost')

Results		Messages
	(No column name)	(No column name)
1	Trying the vc_UserIDLookup function.	NULL

Results		Messages
	TagText	VidCasts
1	Art	256
2	Audio Recording	266
3	Baseball	242
4	Basketball	236
5	Cat Videos	0
6	Collectibles	258
7	Consoles	260
8	Dog Videos	0
9	Fashion	240
10	Football	259
11	Games	254
12	Motors	0
13	Music	237
14	Personal	263
15	Professional	264
16	Sports - General	235

Results		Messages				
	vc_UserID	UserName	EmailAddress	UserDescription	WebSiteURL	UserRegisteredDate
1	1	ethanol	Donec.tempus@penatibusetmagnis.co.uk	Agile development non-disclosure agreement equit...	http://ethanol.vidcast659.site	2017-12-30 22:19:12.000
2	2	dispatcher	quam@aptenittacitisociosqu.ca	A/B testing handshake disruptive seed money info...	http://dispatcher.vidcast659.site	2017-12-08 03:36:00.000
3	3	camel	mauris@massanon.edu	User experience founders branding entrepreneur it...	http://camel.vidcast659.site	2017-08-14 03:21:36.000
4	4	infatuated	molis@Nam.org	Lean startup launch party angel investor branding ...	http://infatuated.vidcast659.site	2017-06-07 17:02:24.000
5	5	hygienist	magna.Ut@necumasuscipit.ca	Business model canvas accelerator pivot network ...	http://hygienist.vidcast659.site	2017-03-17 23:16:48.000
6	6	tardy	kmstudent@syr.edu	Startup leverage growth hacking bootstrapping scr...	http://tardy.vidcast659.site	2017-03-12 15:36:00.000
7	7	wood	turpis.egestas.Fusce@massanonante.net	Technology investor marketing alpha.	http://wood.vidcast659.site	2017-06-21 15:36:00.000
8	8	mallard	vel.lectus.Cum@veliteget.edu	Assets sales success bandwidth business model c...	http://mallard.vidcast659.site	2017-09-15 19:55:12.000
9	9	lifted	eu@elitsed.net	NULL	http://lifted.vidcast659.site	2017-04-15 20:24:00.000
10	10	gum	ut@pharetraQuisqueac.com	Infographic incubator hypotheses client conversio...	http://gum.vidcast659.site	2017-02-24 09:07:12.000
11	11	shrimp	ut@pharetraQuisqueac.com	Infographic incubator hypotheses client conversio...	http://shrimp.vidcast659.site	2017-02-24 09:07:12.000

Results Messages		
	TagText	VidCasts
1	Art	256
2	Audio Recording	266
3	Baseball	242
4	Basketball	236
5	Cat Videos	0
6	Collectibles	258
7	Consoles	260
8	Dog Videos	0
9	Fashion	240
10	Football	259
11	Games	254
12	Motors	0

Results Messages			
	UserName	VidCastCount	TotalMinutes
1	ecstatic	22	2682
2	principle	19	3413
3	canadian	18	1928
4	metacarpal	18	3053
5	przewalski	17	2664
6	silly	17	2851
7	archives	16	2374
8	doughnut	16	1830
9	groggy	16	2464
10	sines	16	2316

Results Messages			
	vc_TagID	TagText	TagDescription
1	17	SQL	Finally, a SQL Tag

Results Messages								
	vc_VidCastID	VidCastTitle	StartDateTime	EndDateTime	ScheduleDurationMinutes	RecordingURL	vc_UserID	vc_StatusID
1	859	Finally done with sprocs	2021-03-09 21:21:49.917	NULL	45	NULL	6	2

	vc_VidCastID	VidCastTitle	StartDateTime	EndDateTime	ScheduleDurationMinutes	RecordingURL	vc_UserID	vc_StatusID
1	859	Finally done with sprocs	2021-03-09 21:21:49.917	2021-03-09 22:06:49.920	45	NULL	6	3

```
Create function dbo.vc_VidCastCount(@userID int)
Returns int as
Begin
Declare @returnValue int
Select @returnValue= Count(vc_UserID) from vc_VidCast
where vc_VidCast.vc_UserID= @userID
Return @returnValue
End
Go
```

```
Select Top 10
*
, dbo.vc_VidCastCount(vc_UserID) as VidCastCount
From vc_User
Order by VidCastCount DESC
```

```
Create function dbo.vc_TagIDLookup(@tagText varchar(20))
Returns int as
Begin
Declare @returnValue int
Select @returnValue= vc_TagID from vc_Tag
where TagText= @tagText
Return @returnValue
End
Go
```

```
select dbo.vc_TagIDLookup('Music')
select dbo.vc_TagIDLookup('Tunes')
```

```
Create view vc_MostProlificUsers as
Select Top 10
*
, dbo.vc_VidCastCount(vc_UserID) as VidCastCount
from vc_User
Order By VidCastCount DESC
Go
```

```
select * from vc_MostProlificUsers
```

```
Create Procedure vc_ChangeUserEmail(@userName varchar(20), @newEmail
varchar(50))
AS
Begin
```

```
Update vc_User set EmailAddress=@newEmail
Where UserName=@userName
End
Go
```

```
EXEC vc_ChangeUserEmail 'tardy', 'kmstudent@syr.edu'
```

```
select * from vc_User where UserName= 'tardy'
```

```
Insert into vc_Tag (TagText) Values ('Cat Videos')
Select * from vc_Tag where vc_TagID= @@IDENTITY
```

```
Insert into vc_Tag (TagText) VALUES ('Dog Videos')
select * from vc_Tag where vc_TagID= SCOPE_IDENTITY()
```

```
Create or Alter Procedure vc_AddUserLogin(@userName varchar(20), @loginFrom
varchar(50))
AS
Begin
Declare @userID int
Select @userID=vc_UserID from vc_User
where UserName= @userName
INSERT INTO vc_UserLogin (vc_UserID, LoginLocation)
Values(@userID, @loginFrom)
Return SCOPE_IDENTITY()
END
GO
```

```
Declare @addedValue int
EXEC @addedValue= vc_AddUserLogin 'tardy', 'localhost'
Select
vc_User.vc_UserID,
vc_User.UserName,
vc_UserLogin.UserLoginTimestamp,
vc_UserLogin.LoginLocation
From vc_User
join vc_UserLogin on vc_User.vc_UserID= vc_UserLogin.vc_UserID
where vc_UserLoginID=@addedValue
```

```
SELECT * from [dbo].[vc_AddUserLogin]('tardy', 'localhost')
```

--Part 2

```
Create function dbo.vc_UserIDLookup(@userName varchar(20))
Returns int as
```

Begin

Declare @returnValue int

Return @returnValue

End

Go

select 'Trying the vc_UserIDLookup function.', dbo.vc_UserIDLookup('tardy')

--function called dbo.vc_TagVidCastCount that calculates the count of vc_VidCastIDs for a given vc_TagID

CREATE FUNCTION dbo.vc_TagVidCastCount(@tagID int)

RETURNS int AS

BEGIN

DECLARE @returnValue int

SELECT @returnValue = COUNT(vc_TagID) FROM vc_VidCastTagList

WHERE vc_VidCastTagList.vc_TagID = @tagID

RETURN @returnValue

END

GO

---Testing the TagVidCastCount Function

SELECT

vc_Tag.TagText

, dbo.vc_TagVidCastCount(vc_Tag.vc_TagID) as VidCasts

FROM vc_Tag

-- function called vc_VidCastDuration that SUMs the total number of minutes of actual duration for VidCasts with a Finished status given a vc_UserID as a parameter.

CREATE FUNCTION dbo.vc_VidCastDuration(@userID int)

RETURNS int AS

BEGIN

DECLARE @returnValue int

SELECT @returnValue = SUM(DATEDIFF(n, StartDateTime, EndDateTime)) FROM

vc_VidCast

WHERE vc_VidCast.vc_UserID = @userID

RETURN @returnValue

END

GO

--Testing VidCastDuration function

SELECT

, dbo.vc_VidCastDuration(vc_UserID) as TotalMinutes

FROM vc_User

--Create a view called vc_TagReport

```
CREATE VIEW vc_TagReport AS
SELECT
vc_Tag.TagText
, dbo.vc_TagVidCastCount(vc_Tag.vc_TagID) as VidCasts
FROM vc_Tag
GO
```

--Testng Tag Report View

```
SELECT
vc_Tag.TagText
, dbo.vc_TagVidCastCount(vc_Tag.vc_TagID) as VidCasts
FROM vc_Tag
```

--Alter the view called vc_MostProlificUsers

```
ALTER VIEW vc_MostProlificUsers AS
SELECT TOP 10
*
, dbo.vc_VidCastCount(vc_UserID) as VidCastCount
, dbo.vc_VidCastDuration(vc_UserID) as TotalMinutes
FROM vc_User
ORDER BY VidCastCount DESC
GO
```

--Testing Alter View

```
SELECT UserName, VidCastCount, TotalMinutes FROM vc_MostProlificUsers
```

--Stored Procedure

```
CREATE PROCEDURE vc_AddTag(@tagText varchar(20), @description
varchar(100)=NULL) AS
BEGIN
INSERT INTO vc_Tag (TagText, TagDescription)
VALUES(@tagText, @description)
RETURN @@identity
END
```

--Test procedure

```
DECLARE @newTagID int
EXEC @newTagID = vc_AddTag 'SQL', 'Finally, a SQL Tag'
SELECT * FROM vc_Tag where vc_TagID = @newTagID
```

--Stored procedure called vc_FinishVidCast

```
CREATE PROCEDURE vc_FinishVidCast(@vidCastID int)
AS
```



```

BEGIN
UPDATE vc_VidCast SET EndDateTime = GetDate(), vc_StatusID = 3
WHERE vc_VidCastID = @vidCastID
END
GO

--Execute the procedure
DECLARE @newVC int
INSERT INTO vc_VidCast
(VidCastTitle, StartDateTime, ScheduleDurationMinutes, vc_UserID,
vc_StatusID)
VALUES (
'Finally done with sprocs'
, DATEADD(n, -45, GETDATE())
, 45
, (SELECT vc_UserID FROM vc_User WHERE UserName = 'tardy')
, (SELECT vc_StatusID FROM vc_Status WHERE StatusText='Started')
)
SET @newVC = SCOPE_IDENTITY()
SELECT * FROM vc_VidCast WHERE vc_VidCastID = @newVC
EXEC vc_FinishVidCast @newVC
SELECT * FROM vc_VidCast WHERE vc_VidCastID = @newVC

```