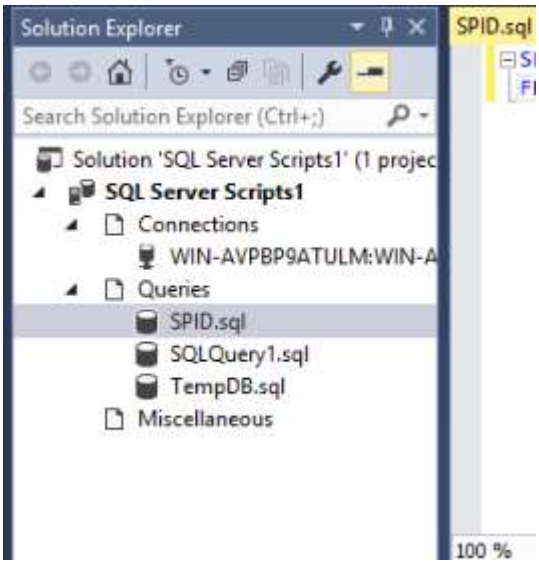
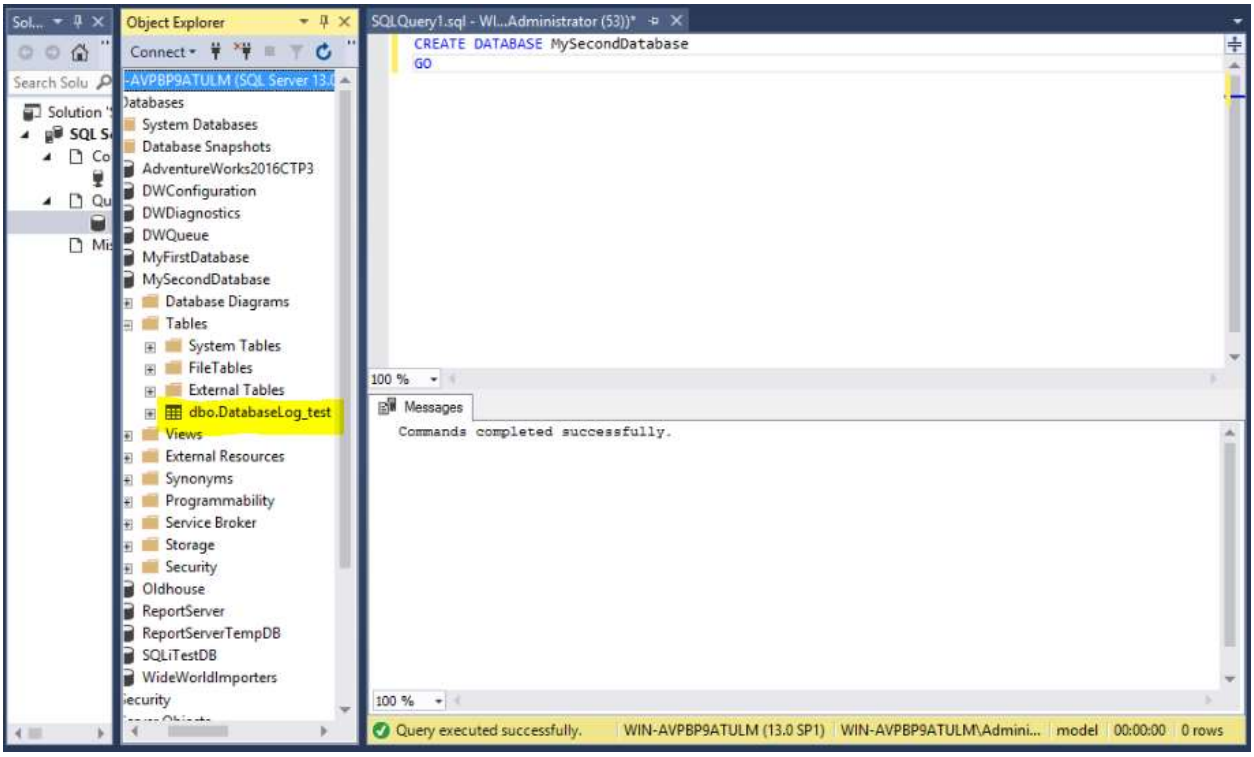
Homework #2: Mastering the Basics of SQL Server

- This is an individual assignment, and is worth 20 points.
- The due date is Monday, February 1st Midnight (*late work not accepted*)
- You have to use the "Homework #2-Tasks.docx" file to provide your answers. Change this file name according the naming convention below.
- Use the following naming convention: homework, underscore, last name, first initial, and extension (e.g., Homework #2_ImG.docx). If you do not follow the convention, I will deduct 1.0.
- Do not copy any of the sample screenshots provided as illustrations.
- Report any issues before the deadline.

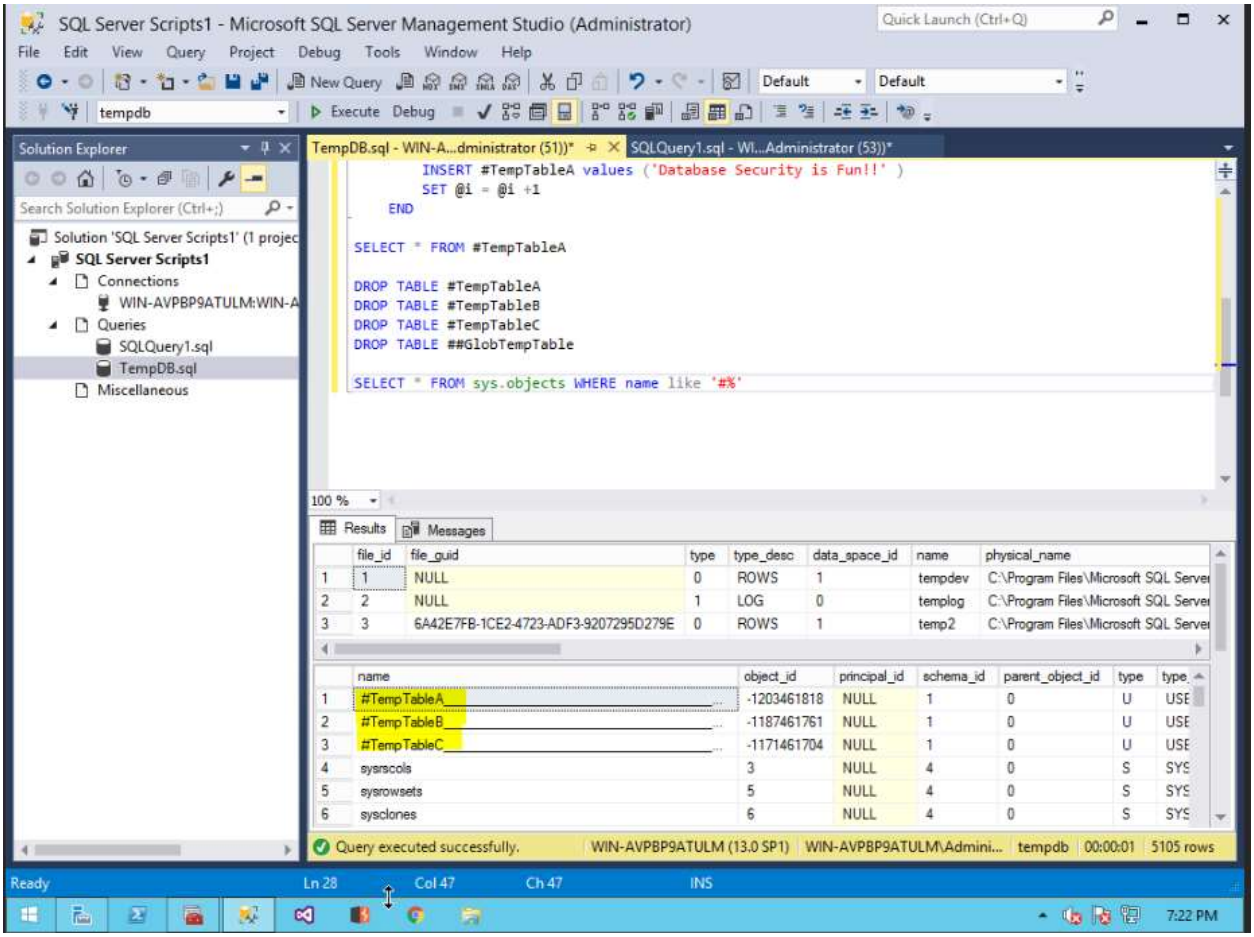
(Task 1: 5 points) Complete Task #2 through Task #4 while placing your sql files in Queries. Show in a screenshot that your Homework 2 project in Solution Explorer contains **three** sql files in **Solution Explorer**.



(Task 2: 5 points) Show in a screenshot that **DatabaseLog_test** table is created in **MySecondDatabase**, and **not** in **MyFirstDatabase**.



(Task 3: 4 points) Create the three temp tables listed above and show their existence using the SELECT command above. Attach a screenshot.



(Question: 1 points) When do we use temporary Tables? List three scenarios. When do we use table variable over temp table? For the answers, go to the link above.

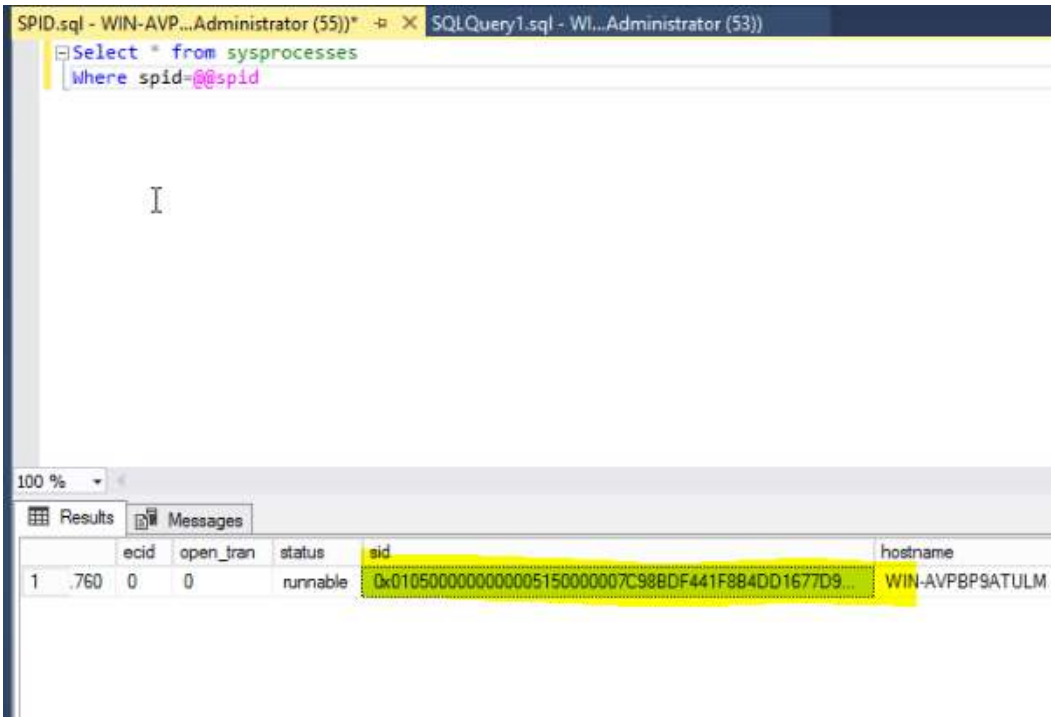
- Temp Tables can be created at runtime and can do the all kinds of operations that one normal table can do. But, based on the table types, the scope is limited.
    - We should use temp tables when we are doing large number of row manipulation in stored procedures, when we want to store the result set data into a temp table and then manipulate the data from there, and when we are having a complex join operation.
    - We use a table variable when using less data. If the result set returns a large number of records, we need to go for temp table.

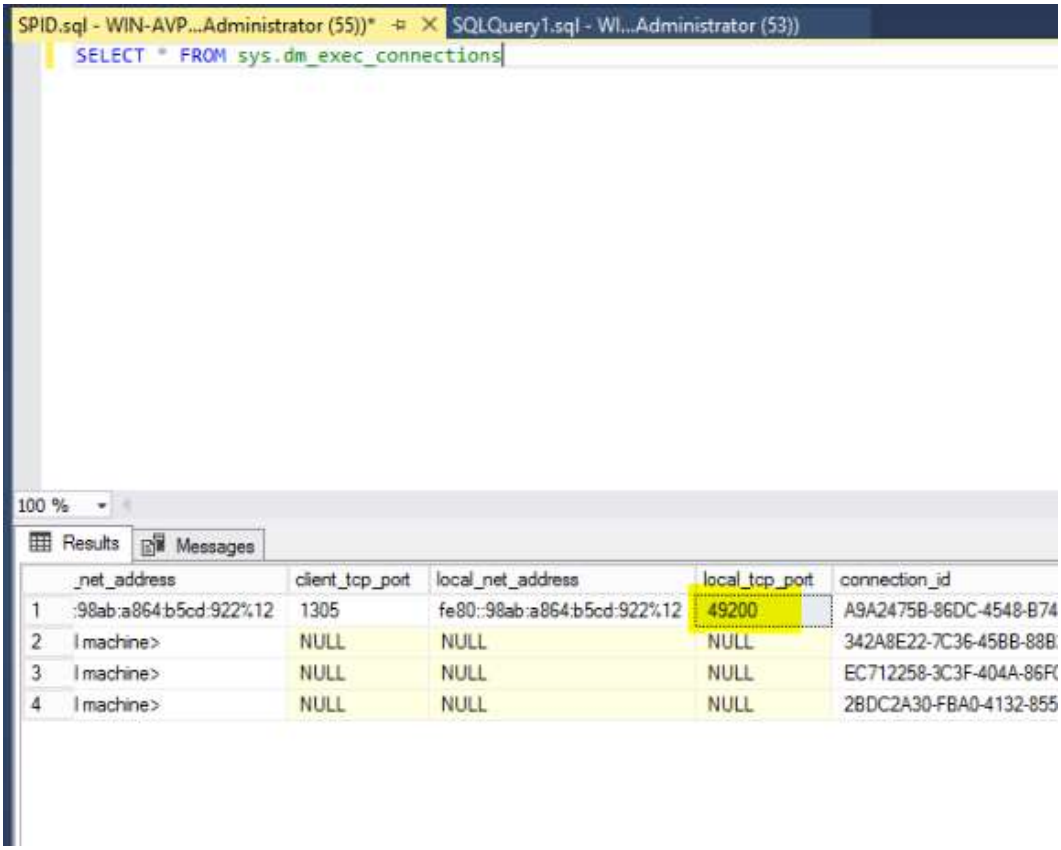
(Task 4: 5 points) Fill in **all** the blanks. Keep in mind that you have made a connection via a dynamic port not the default number. Your answers to the second column must be consistent with the connection you made.

	Name/Number	Description (definition)
SPID	55	A SPID in SQL Server is a Server Process ID. These process ID's are essentially sessions in SQL Server. Everytime an application connects to SQL Server, a new connection (or SPID)

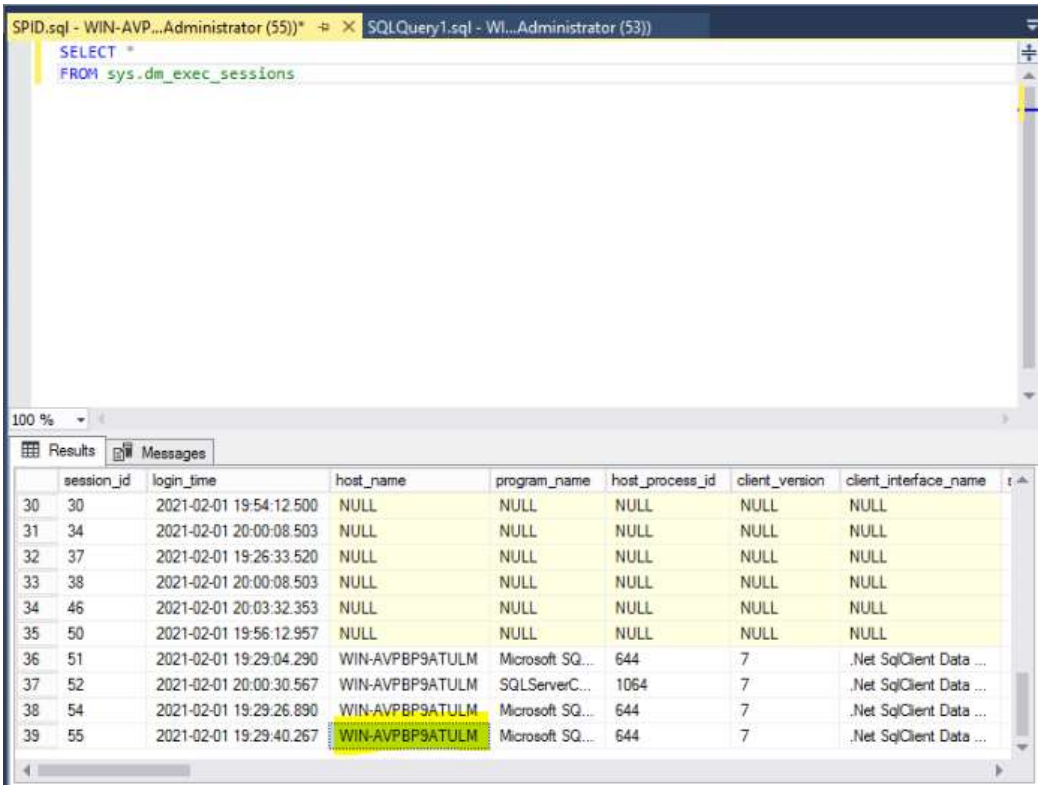
		is created.
SID	0x0105000000000005150000007C98BDF441F8B4DD1677D940F4010000000000000000000000000000000000000000000000000000000000000000000000	The SID identifies the security context of the login and is unique within the server instance. The source of the SID depends on how the login is created.
principal_id	259	The ID (principal_id) identifies the login as a securable within the server. It is assigned by SQL Server when the login is created. When a login is deleted, its ID number is recycled.
net_library	TCP/IP	Net-library is a network interface layer that Microsoft SQL Server uses to communicate with database client software.
local_tcp_port	49200	The TCP/IP architecture permits a port scanner to query for open ports.

In addition, show the result of each of the four queries in a screenshot.

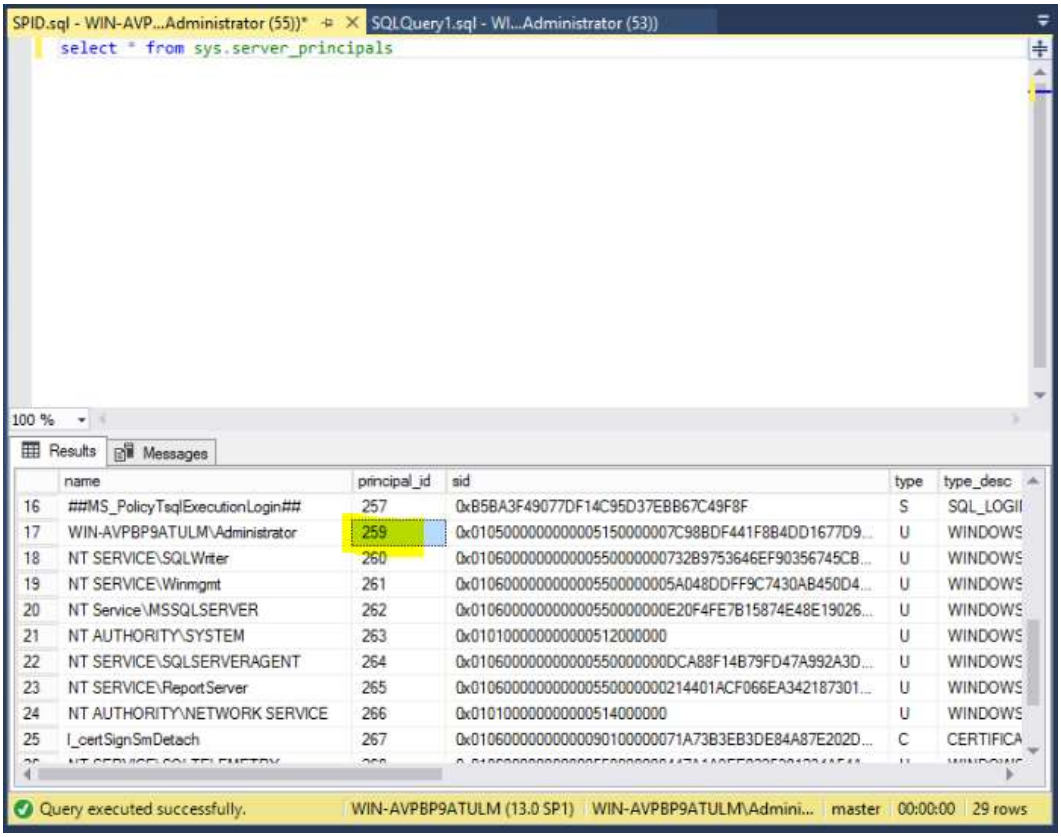




	_net_address	client_tcp_port	local_net_address	local_tcp_port	connection_id
1	:98ab:a864:b5cd:922%12	1305	fe80::98ab:a864:b5cd:922%12	49200	A9A2475B-86DC-4548-B74
2	l machine>	NULL	NULL	NULL	342A8E22-7C36-45BB-88B
3	l machine>	NULL	NULL	NULL	EC712258-3C3F-404A-86F(
4	l machine>	NULL	NULL	NULL	2BDC2A30-FBA0-4132-855



	session_id	login_time	host_name	program_name	host_process_id	client_version	client_interface_name
30	30	2021-02-01 19:54:12.500	NULL	NULL	NULL	NULL	NULL
31	34	2021-02-01 20:00:08.503	NULL	NULL	NULL	NULL	NULL
32	37	2021-02-01 19:26:33.520	NULL	NULL	NULL	NULL	NULL
33	38	2021-02-01 20:00:08.503	NULL	NULL	NULL	NULL	NULL
34	46	2021-02-01 20:03:32.353	NULL	NULL	NULL	NULL	NULL
35	50	2021-02-01 19:56:12.957	NULL	NULL	NULL	NULL	NULL
36	51	2021-02-01 19:29:04.290	WIN-AVPBP9ATULM	Microsoft SQ...	644	7	.Net SqlClient Data ...
37	52	2021-02-01 20:00:30.567	WIN-AVPBP9ATULM	SQLServerC...	1064	7	.Net SqlClient Data ...
38	54	2021-02-01 19:29:26.890	WIN-AVPBP9ATULM	Microsoft SQ...	644	7	.Net SqlClient Data ...
39	55	2021-02-01 19:29:40.267	WIN-AVPBP9ATULM	Microsoft SQ...	644	7	.Net SqlClient Data ...


SPID.sql - WIN-AVP...Administrator (55))*
SQLQuery1.sql - WI...Administrator (53))
select * from sys.server_principals
100 %
Results
Messages
name
principal_id
sid
type
type_desc
16 ##MS_PolicyTsqlExecutionLogin## 257 0xB5BA3F49077DF14C95D37EBB67C49F8F S SQL_LOGI
17 WIN-AVPBP9ATULM\Administrator 259 0x0105000000000005150000007C98BDF441F8B4DD1677D9... U WINDOWS
18 NT SERVICE\SQLWriter 260 0x0106000000000005500000007328753646EF90356745CB... U WINDOWS
19 NT SERVICE\Winmgmt 261 0x0106000000000005500000005A048DDFF9C7430AB450D4... U WINDOWS
20 NT Service\MSSQLSERVER 262 0x0106000000000005500000000E20F4FE7B15874E48E19026... U WINDOWS
21 NT AUTHORITY\SYSTEM 263 0x0101000000000005120000000 U WINDOWS
22 NT SERVICE\SQLSERVERAGENT 264 0x0106000000000005500000000DCA88F14B79FD47A992A3D... U WINDOWS
23 NT SERVICE\ReportServer 265 0x0106000000000005500000000214401ACF066EA342187301... U WINDOWS
24 NT AUTHORITY\NETWORK SERVICE 266 0x0101000000000005140000000 U WINDOWS
25 l_certSignSmDetach 267 0x0106000000000009010000071A73B3EB3DE84A87E202D... C CERTIFICA
Query executed successfully.
WIN-AVPBP9ATULM (13.0 SP1)
WIN-AVPBP9ATULM\Admini...
master
00:00:00
29 rows