## Part 4: Release Pipeline in Azure DevOps

Next step is to create Release Pipeline. Let's start creating release pipeline step by step:

Step 1: If Azure DevOps already open then go to the Azure DevOps page in the browser else Open any browser and enter https://app.vssps.visualstudio.com/. Logged in with the proper credentials and select the DevOps project crated in our previous step. Click on Release from the left side blade and then click on New pipeline to create new release pipeline
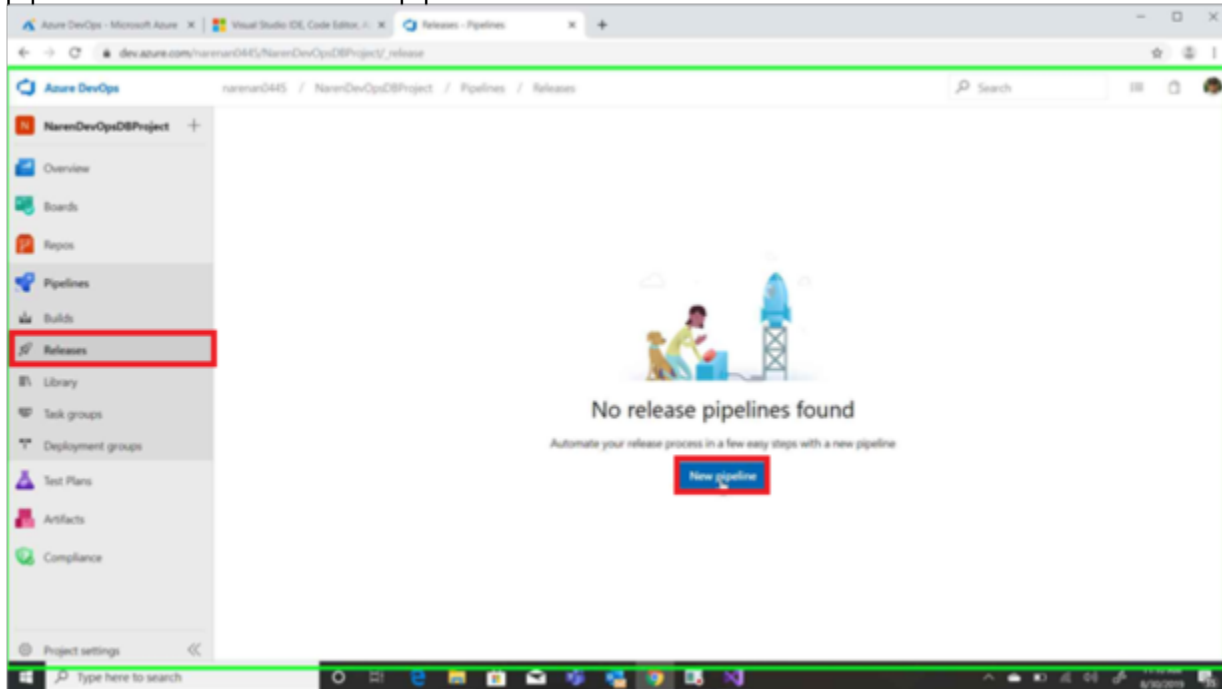

Step 2: You will see new release pipeline blade where you can select Empty job to create new job.
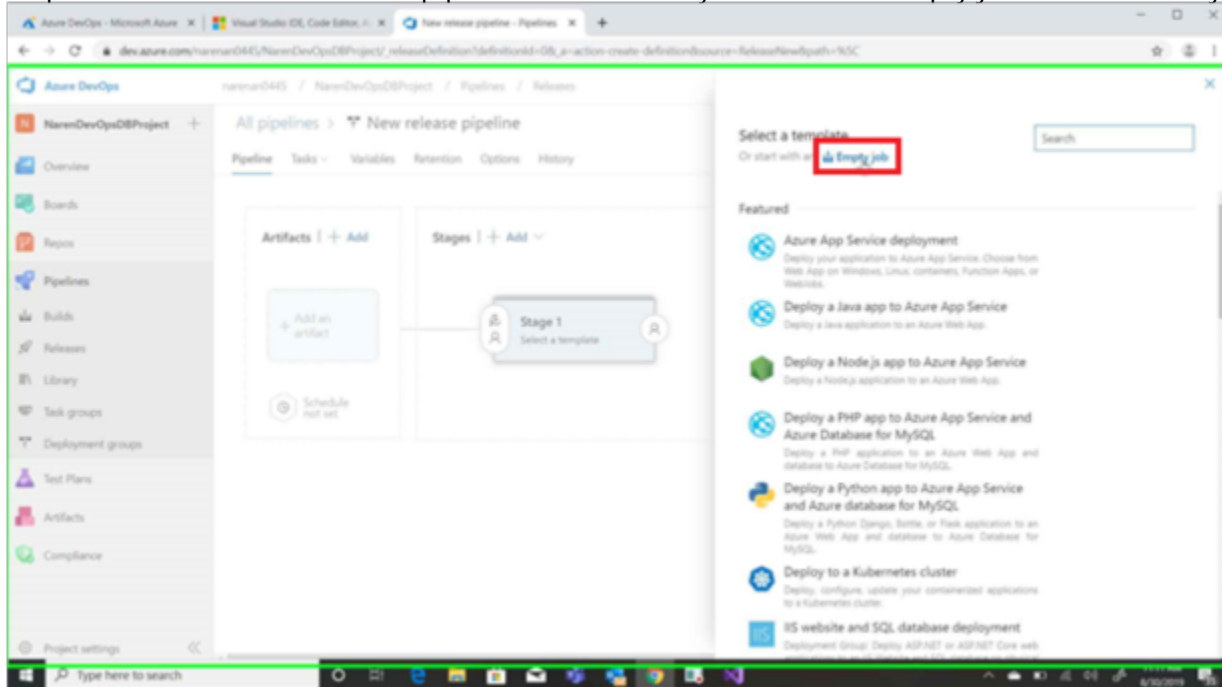
Step 3: Click on "Add an artifact" from the middle blade. It will open Add an artifact blade where you can make sure that "Build" is selected/checked as source type. Select Project Name, select the build

pipeline which was created in previous steps as a "source build pipeline" from the dropdown list. Click Add button to add the artifact in our release pipeline.
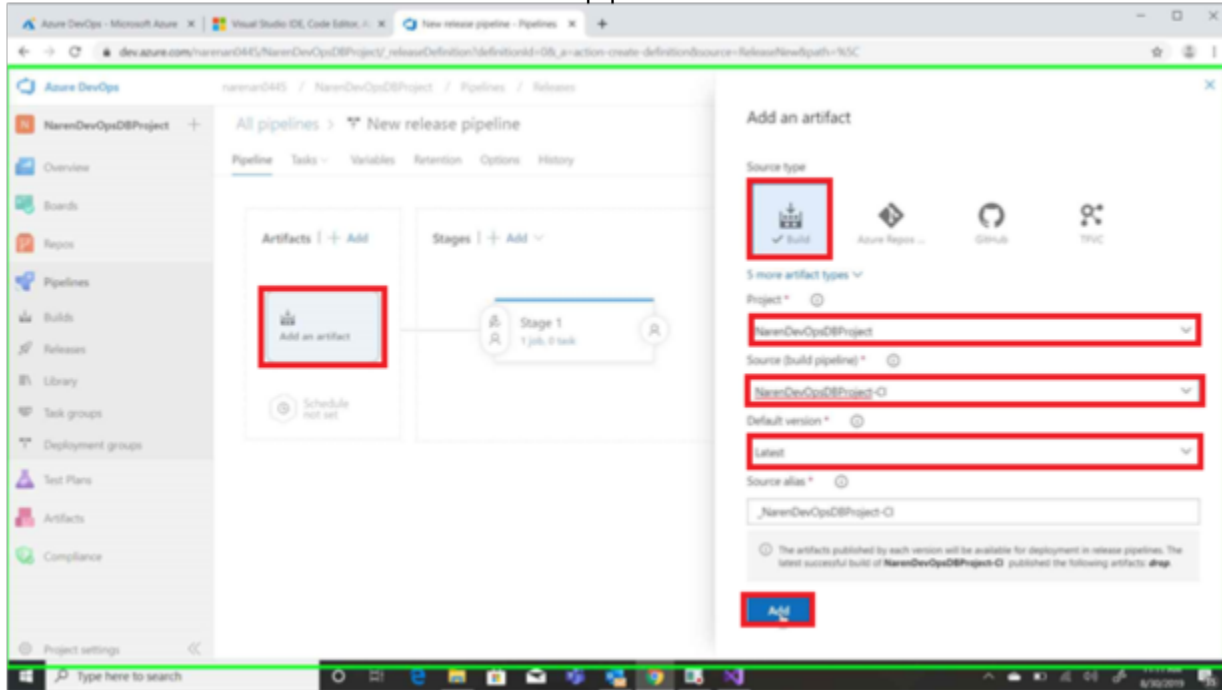

Step 4: select the "continuous deployment trigger" from the newly added artifact.
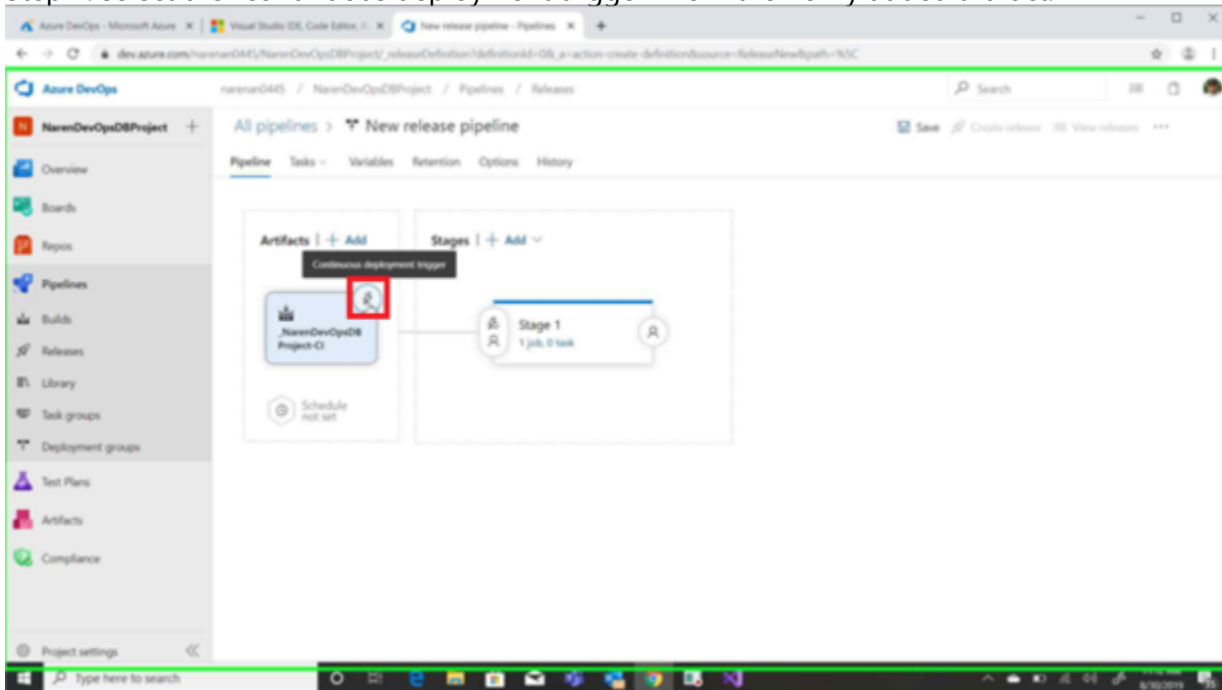
Step 5: From the "Continuous deployment Trigger" blade enable the option which creates a release every time a new build is available and then click on "1 job 0 task" hyperlink from the Stage 1
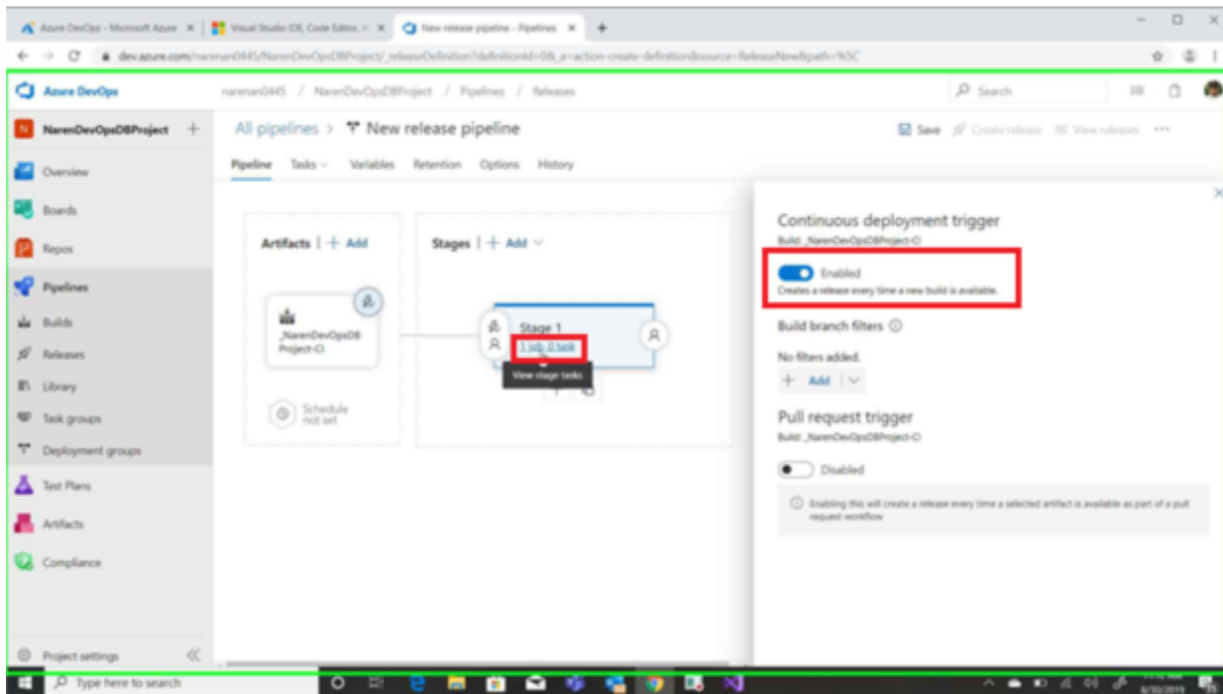
Step 6: It will open task tab from the middle blade. Click + sign front of the Agent Tab to add a task in agent job.
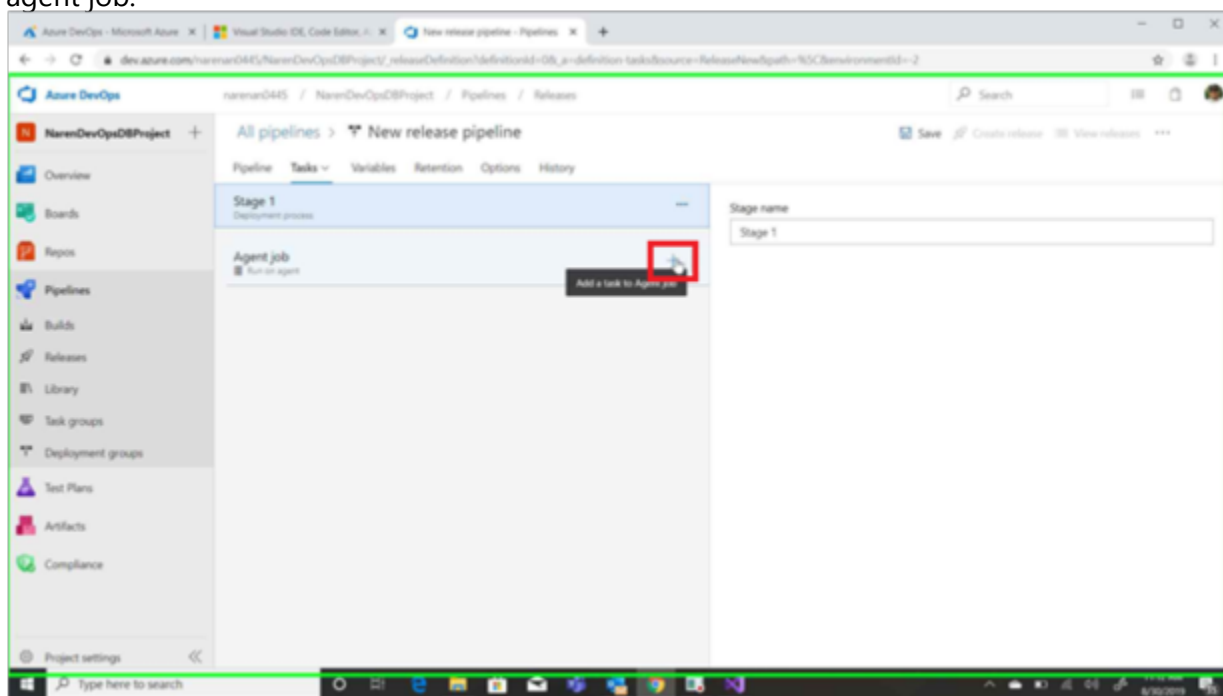

Step 7: In the "Add task" blade, go to the search textbox and type "Azure SQL Database deployment" and add "Azure SQL Database deployment" from the task list.
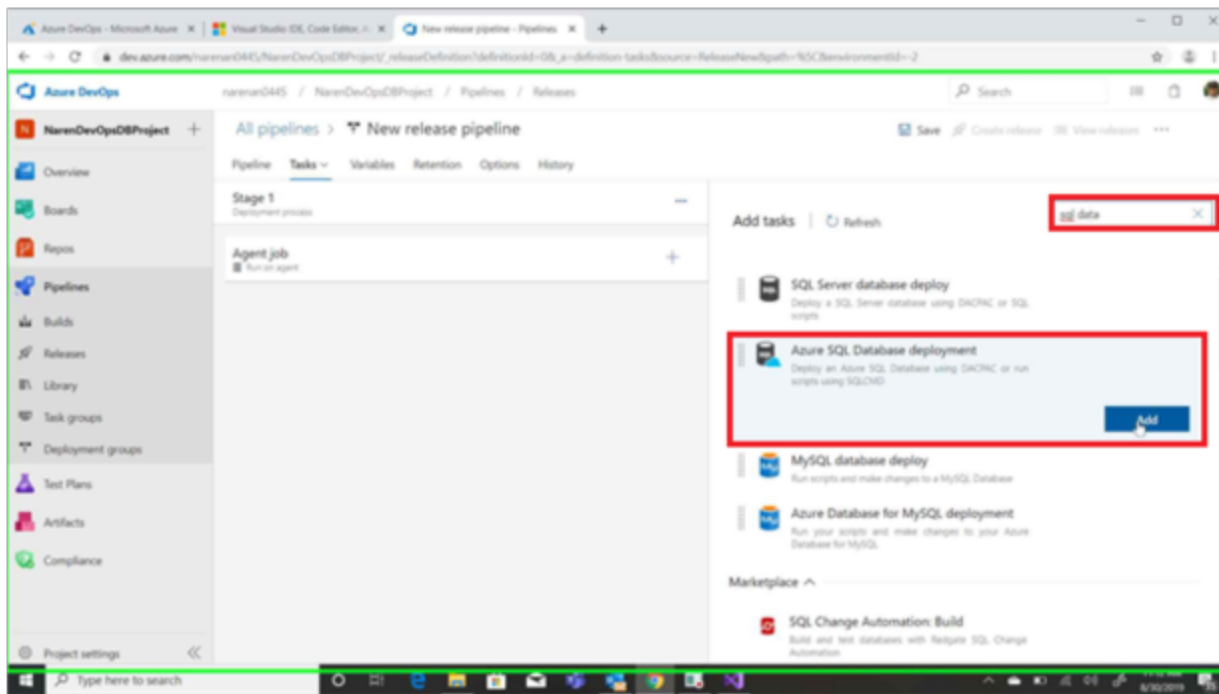
Step 8: Click on newly added "Azure SQL DACPAC task". This will open property window of Azure SQL Database deployment task where you select the properties as follows and click on Save button:

- Display Name: <Enter Name>
- Azure Service Connection Type: Azure Resource Manager
- Azure Subscription: <Choose your subscription> (you need to Authorize yourself)
- SQL Database Authentication Type: SQL Server Authentication
- Azure SQL Server: <Enter Name of SQL Server>
- Database: <Enter Name of the SQL Database>
- Login: <Enter Login Name>
- Password: <Enter Password>
- Deploy Type: SQL DACPAC File
- Action: Publish
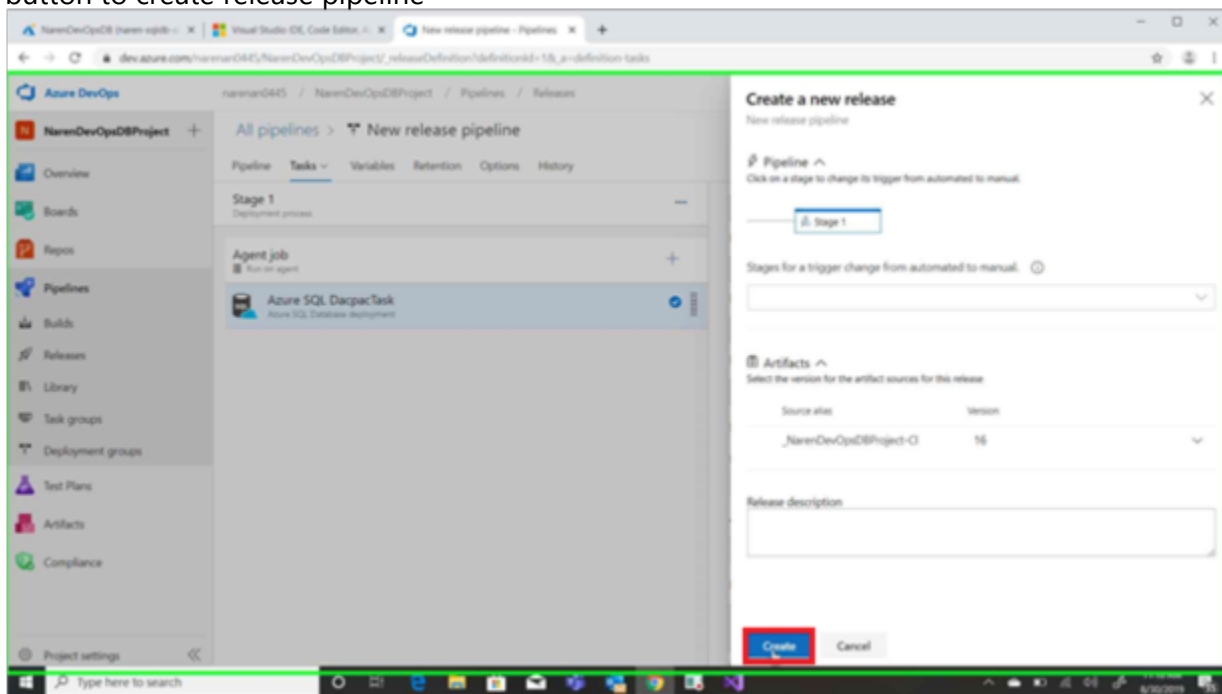- DACPAC file: <Select the DACPAC file location>
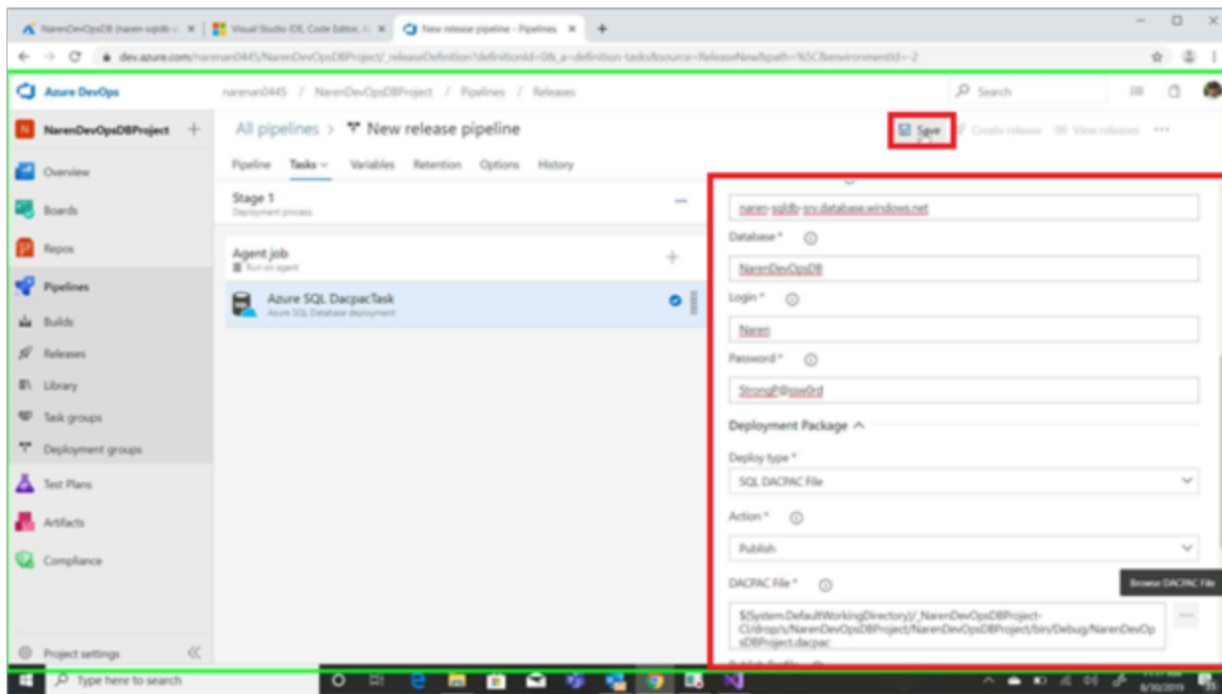
Step 9: In save window select the folder and enter the comments. I have chosen the default option and clicked OK button to save the settings.
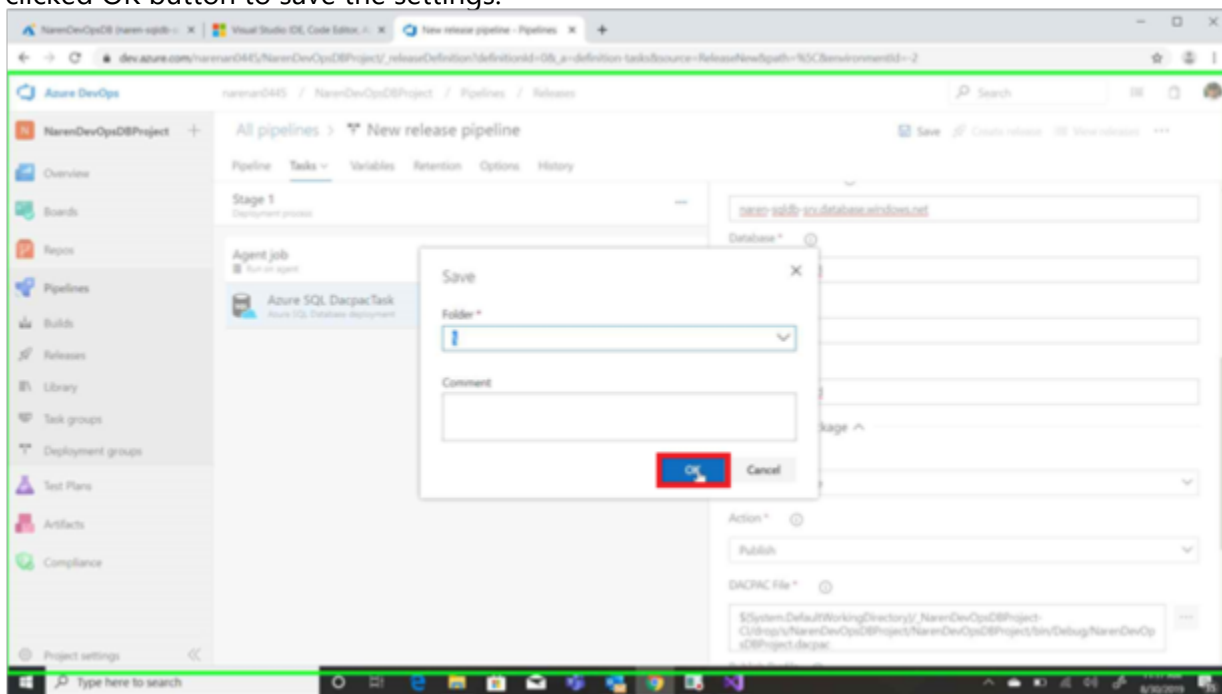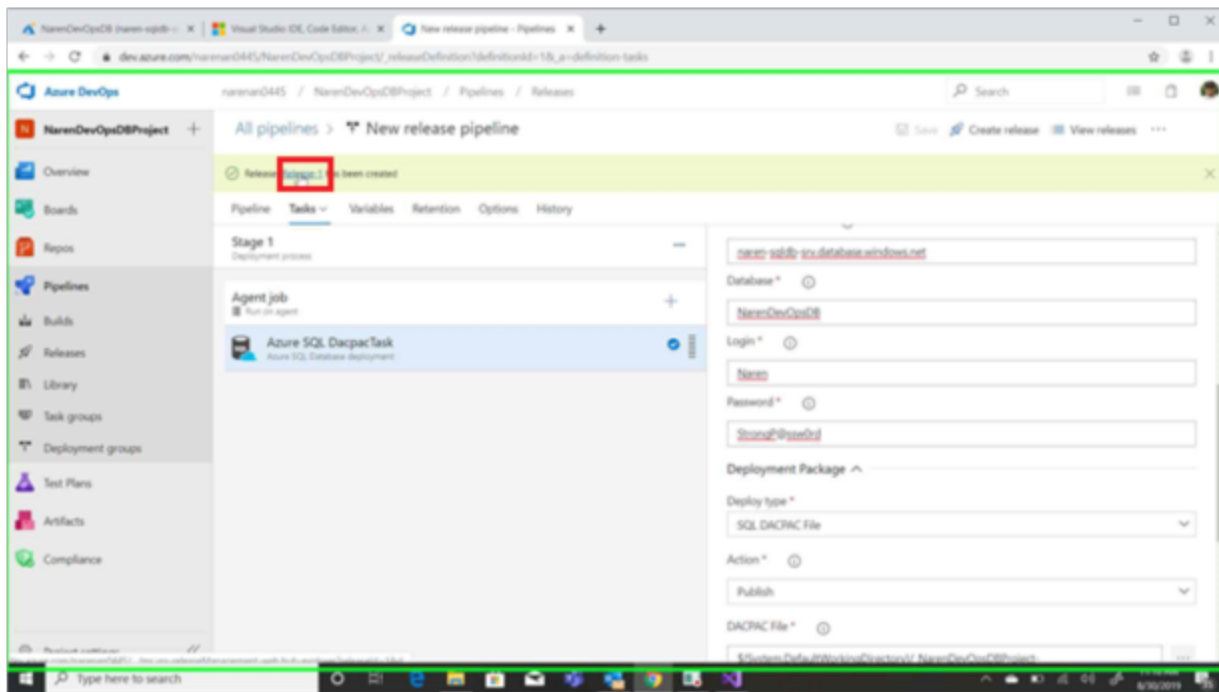

Step 10: Click "Create Release" button
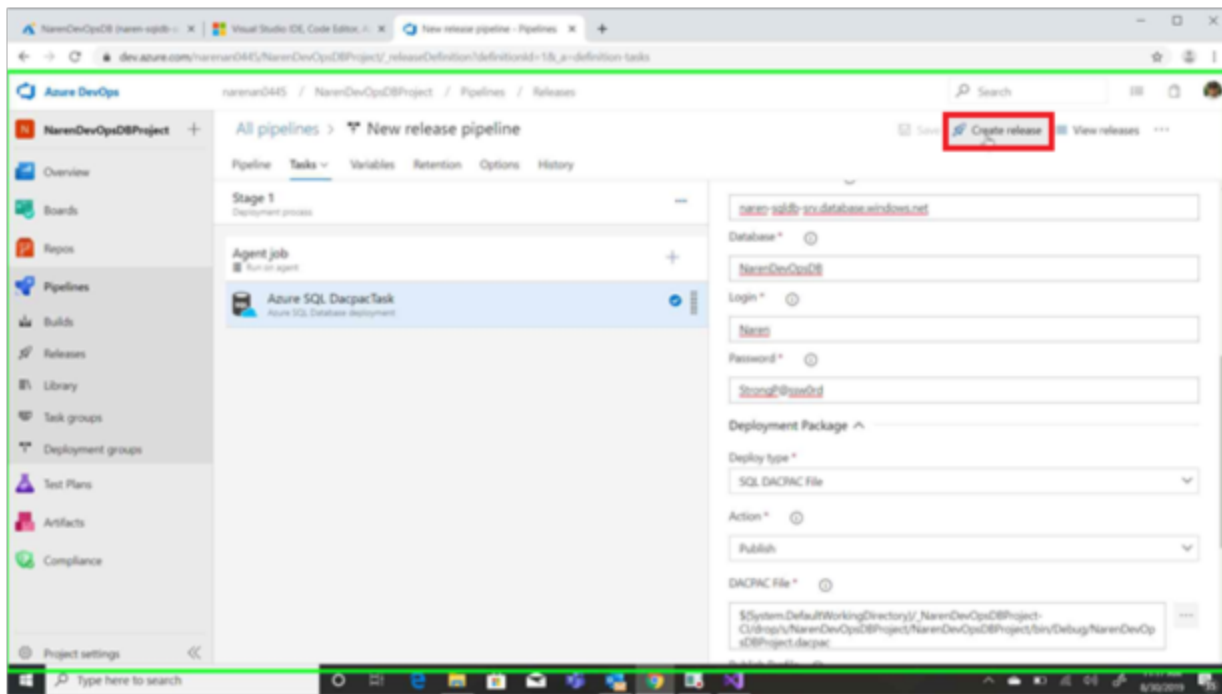
Step 11: It will open "Create a new release" blade, keep the default setting as it and click on Create button to create release pipeline


Step 12: Click on release 1 hyperlink to see the progress of release pipeline

Step 13: It will open the release pipeline. From the "Stage 1" window click on "In Progress" hyperlink which will show you the progress of release pipeline.
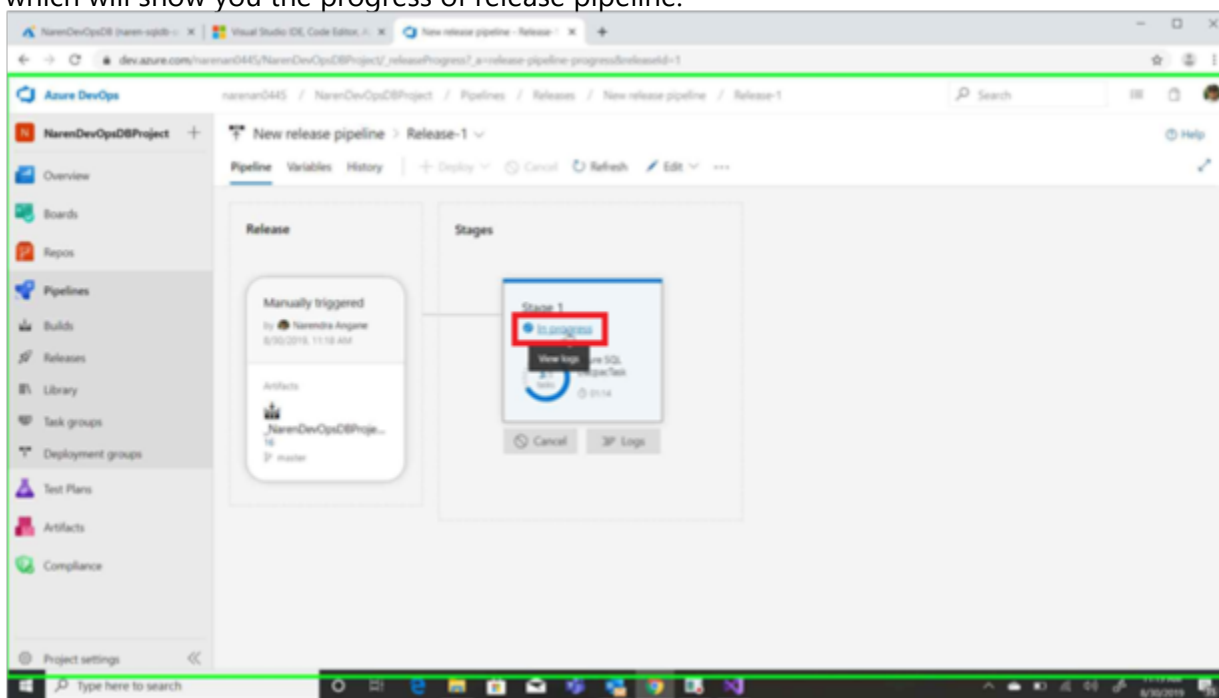

Step 14: You will see the below screen after completion of release pipeline. Click on New release pipeline to go to the new release pipeline page. (If plan to create new release pipeline)
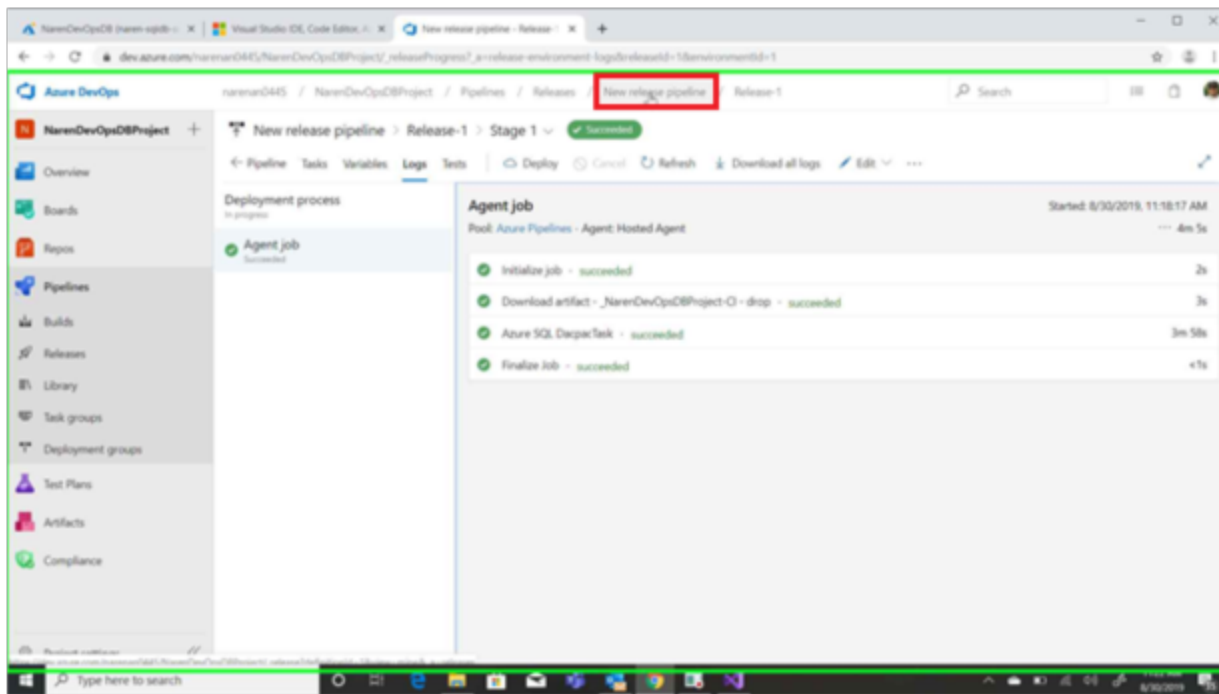
Step 15: Now we have completed our build pipeline and release pipeline successfully. Let's verify the deployment of SQL Database is completed successfully of not by connecting to the target SQL Database using SSMS or VS or Azure data studio. Here we are using SSMS to check. Open SSMS from your machine.
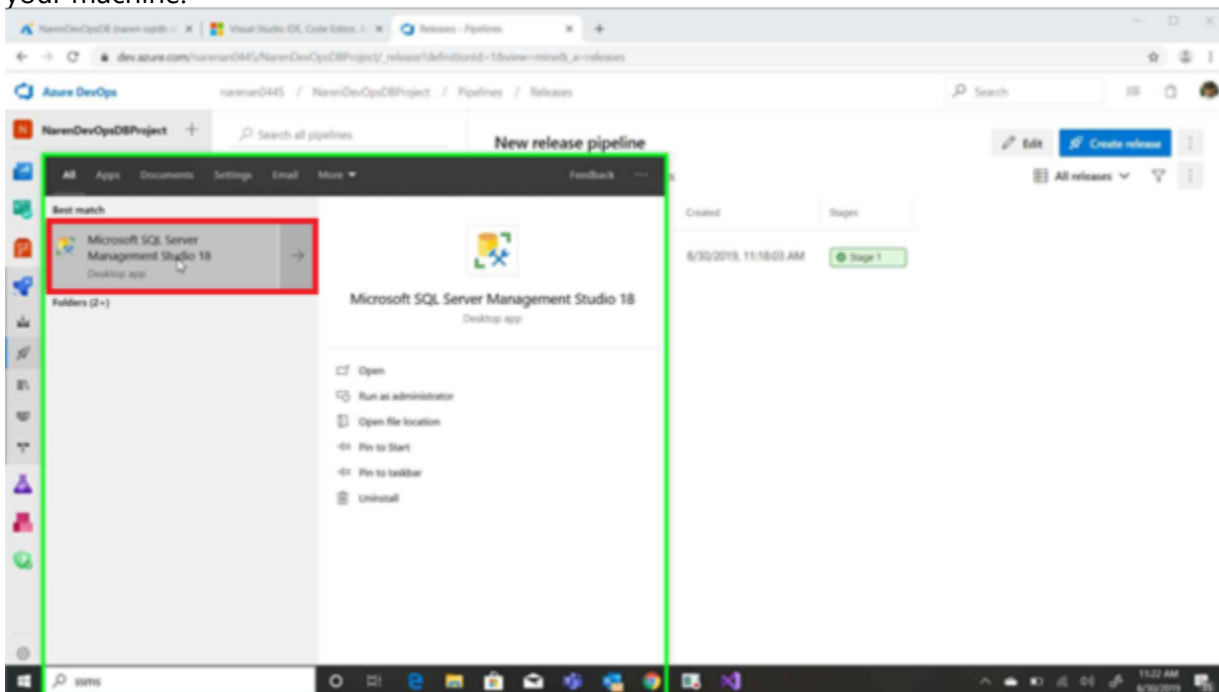

Step 16: Connect targeted SQL Database where SQL Schema deployed using CICD pipeline. Enter Server Name, Use SQL Authentication, Enter User Name, Enter Password and click connect
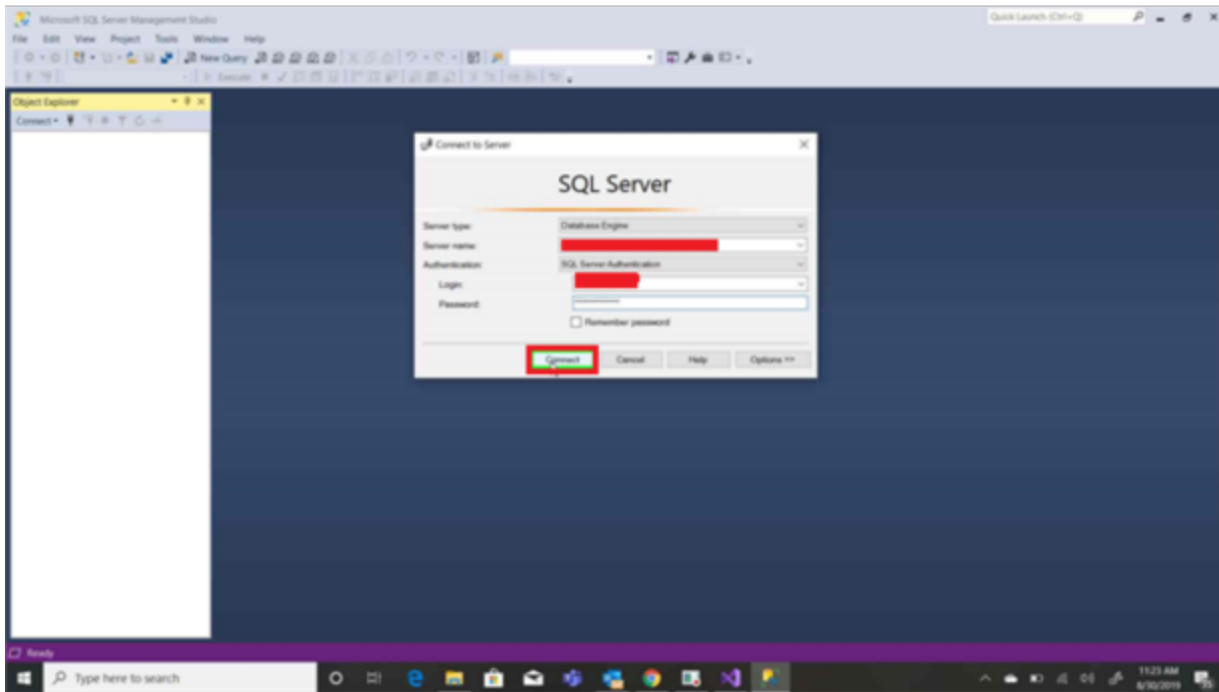
Step 17: From the object Explorer Expand SQL Server -> Databases -> [Deployed Database Name] ->Tables -> dbo.TestTable1", Right click on the table name and from the popup menu select "Select Top 1000 Rows".
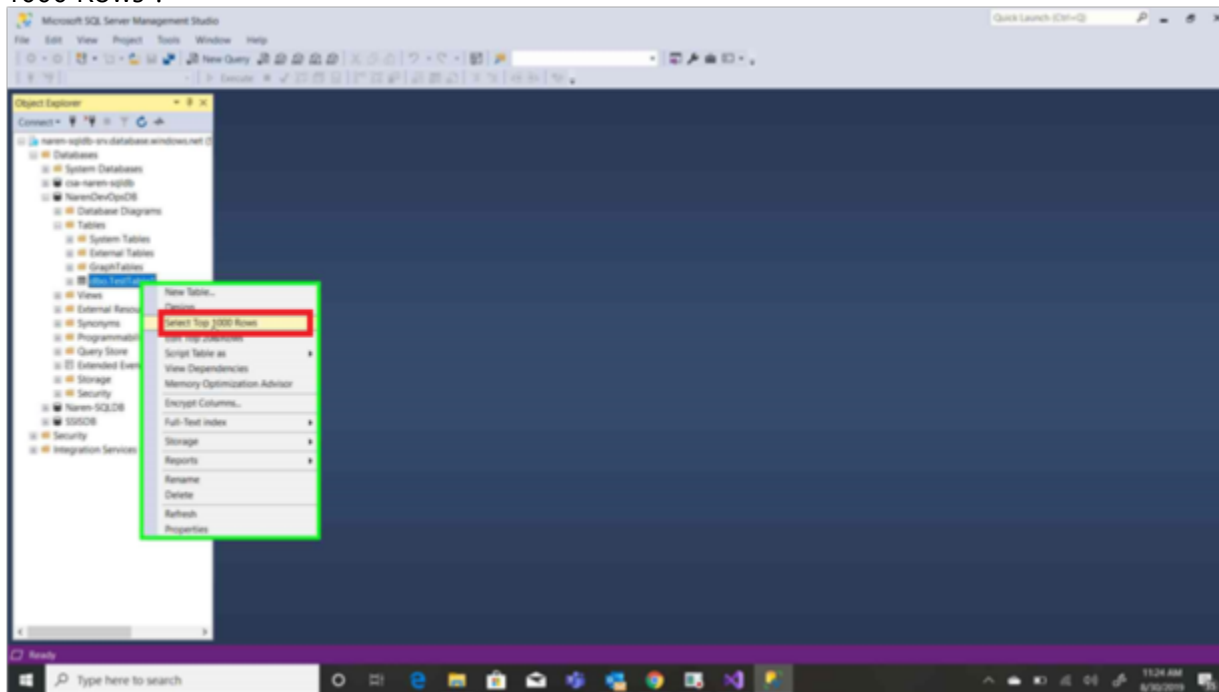
Step 18: You will see in the result pane the id column from the table. You will not see any data because we have not added any data. Table is empty.
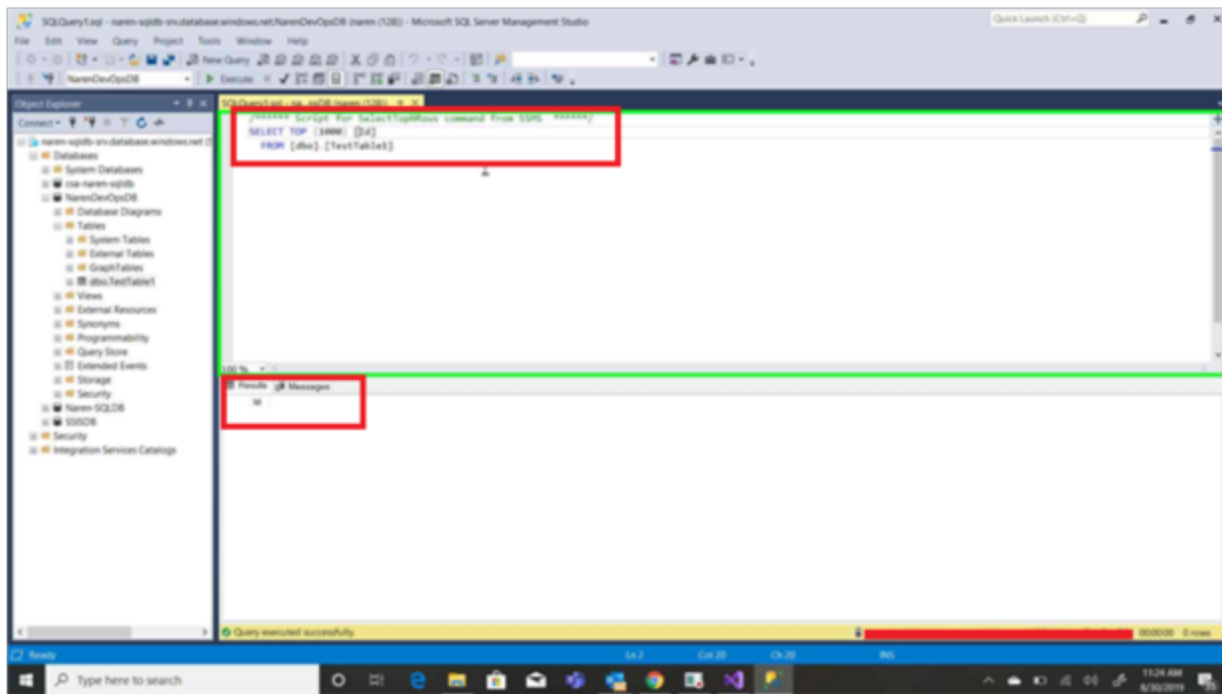
Congratulations! We have successfully deployed the SQL Schema to the Azure SQL Database.