

Indexing in SQL

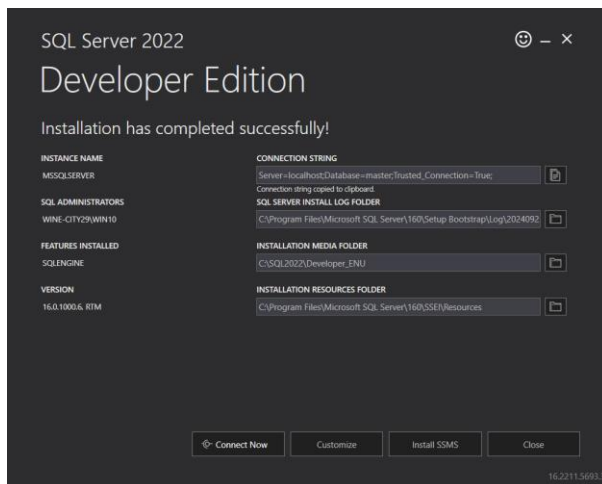
Written by: Sudarshan Mhaisdhune

Prep Work for this demo (Not indexing specific)–

(Don't forget to read file till end)

1) Go to browser and write – Download SQL server 2022.

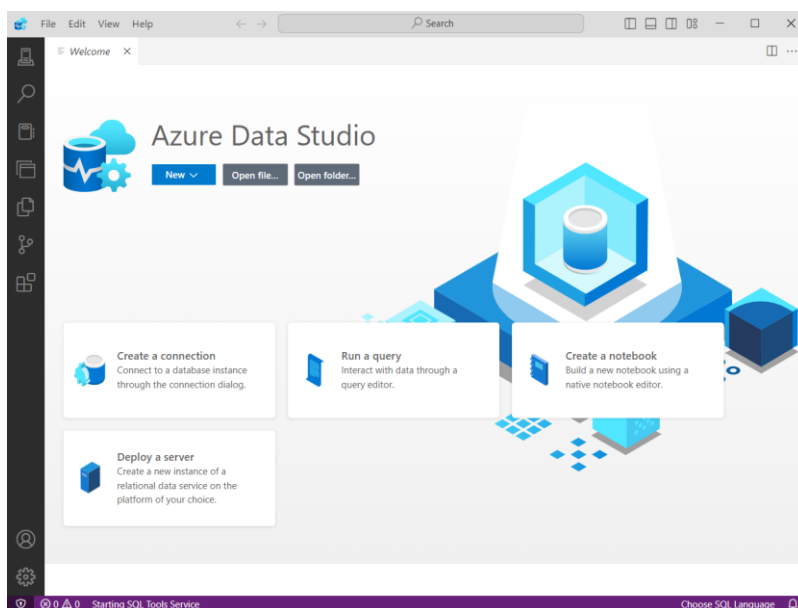
Download it, install and after all the process (process takes some time but it will be one time), you'll end up getting this on application page-



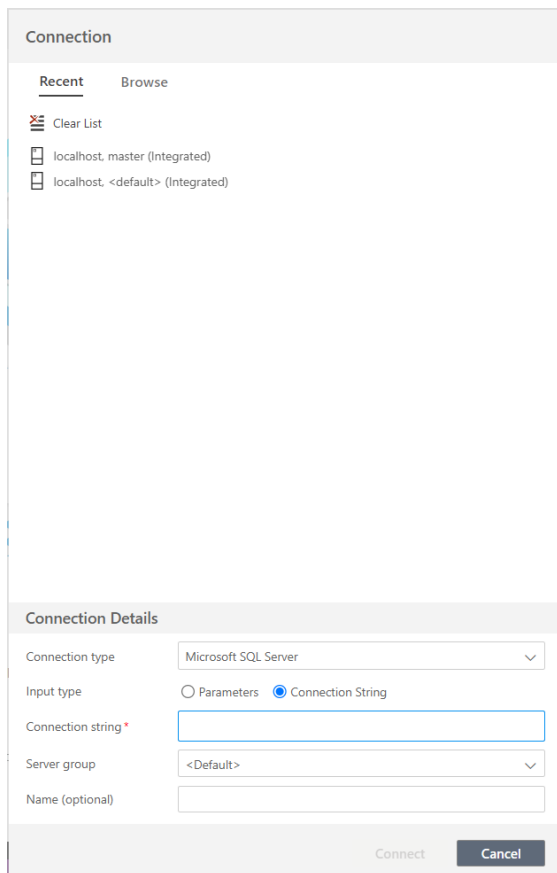
CONNECTION STRING is what matters to us. Copy it and paste it somewhere.

2) Go to browser and write- Download Azure Data Studio.

Download it, install and after all the process (process will be quick), you'll end up getting this on application page-



Go to **Create a connection** and you'll get something like this-



Connection

Recent Browse

Clear List

- localhost, master (Integrated)
- localhost, <default> (Integrated)

Connection Details

Connection type: Microsoft SQL Server

Input type: ☐ Parameters ☒ Connection String

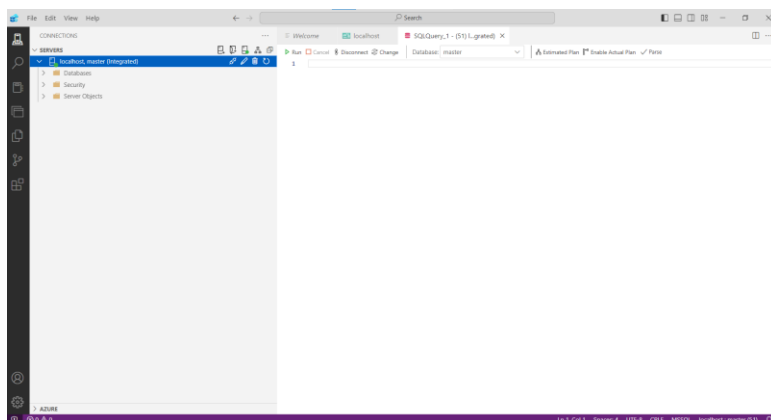
Connection string*:

Server group: <Default>

Name (optional):

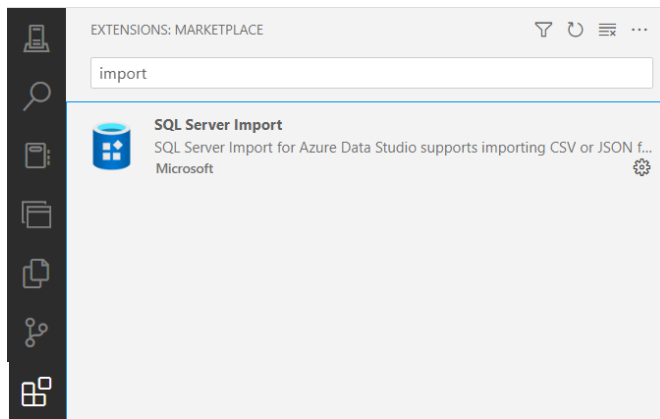
Connect Cancel

Paste connection string here which I asked to paste somewhere and you'll get screen like this-

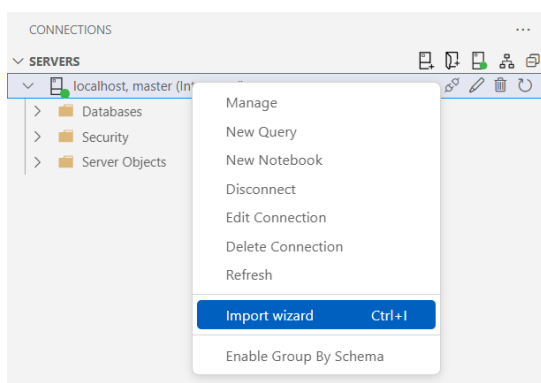


Now we want to import orders.csv which is used to demonstrate.

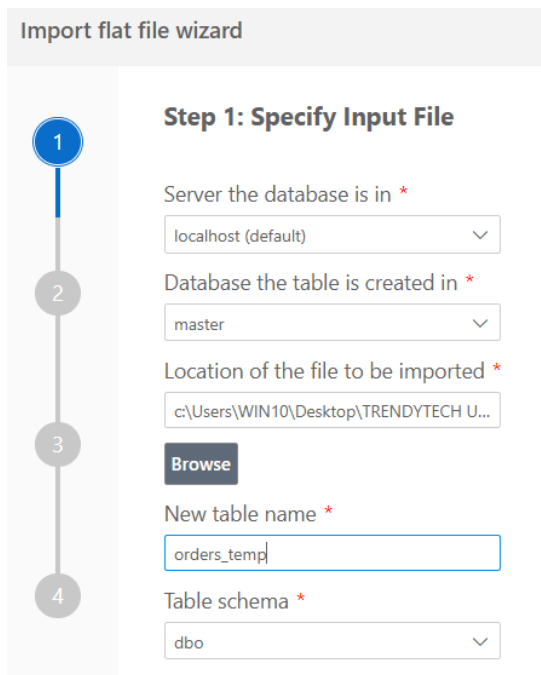
Go to **Extensions** on Azure Data Studio (left top 7th Icon) and just type- import
And install the extension-



After installing, you'll get **import wizard** option once you right click on localhost as-



Click on that option and import the orders.csv file (which is attached in this post) as **orders_temp table** as-



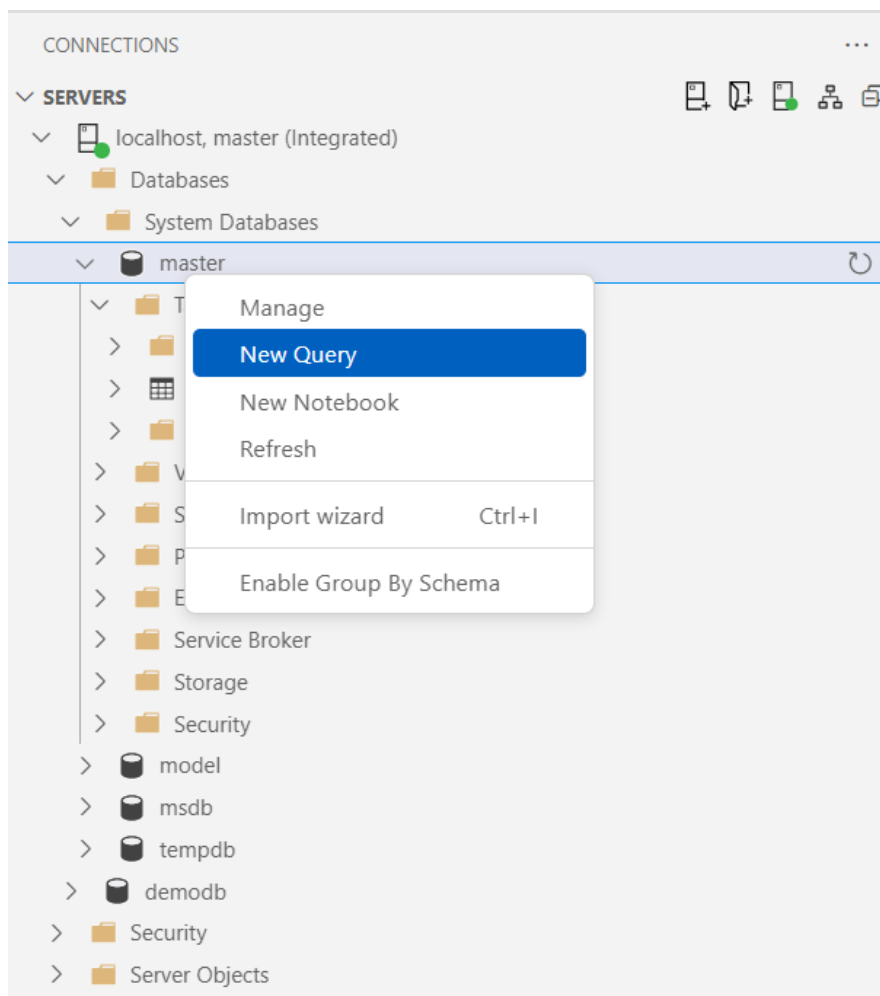
Click Next, Next and do changes as-

Step 3: Modify Columns

Column Name	Data Type	Primary Key <input type="checkbox"/>	Allow Nulls <input type="checkbox"/>
order_id	int	<input type="checkbox"/>	<input type="checkbox"/>
order_date	datetime	<input type="checkbox"/>	<input type="checkbox"/>
order_customer_id	int	<input type="checkbox"/>	<input type="checkbox"/>
order_status	nvarchar(50)	<input type="checkbox"/>	<input type="checkbox"/>

And click on **import data** option.

Follow below step-



And paste the code which is attached in the post.

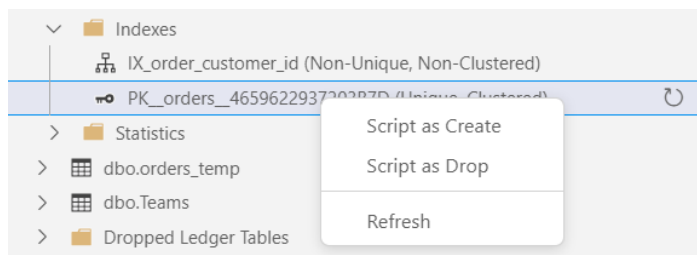
Execute line-by-line to get understanding of indexing in SQL.

Indexing specific

After each line execution, check ‘Estimated plan’ of that query to clearly understand whether query has benefited from indexing or not.



To drop primary key constraint (code line 49 and 50 in .sql file), follow below step-



Click **script as drop**, you'll get new script of 2 lines, copy it, paste it at line number 49 and 50 and execute.

Happy Learning!