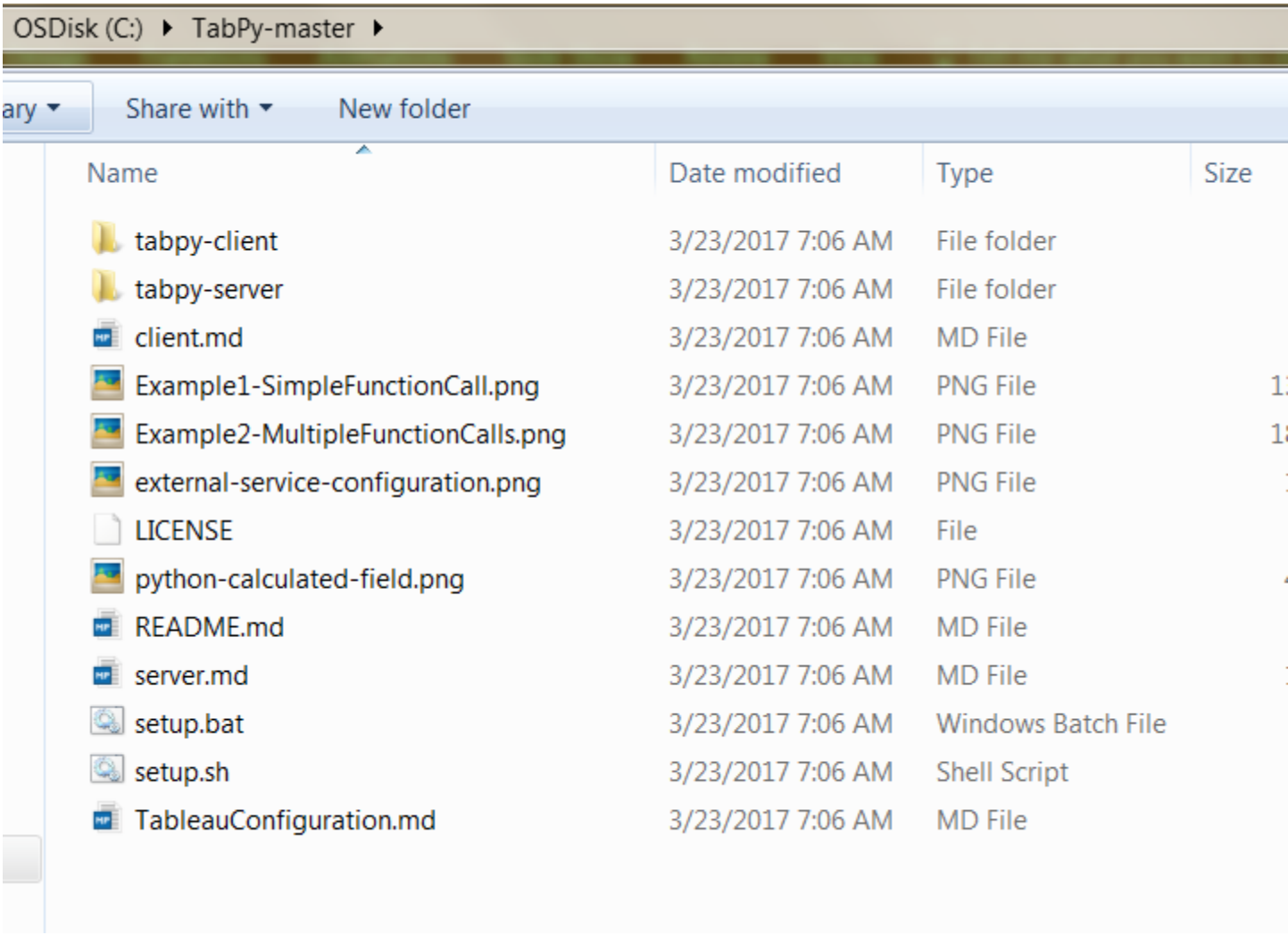
Python and Tableau Integrations Steps:

Extract TabPy-master.zip

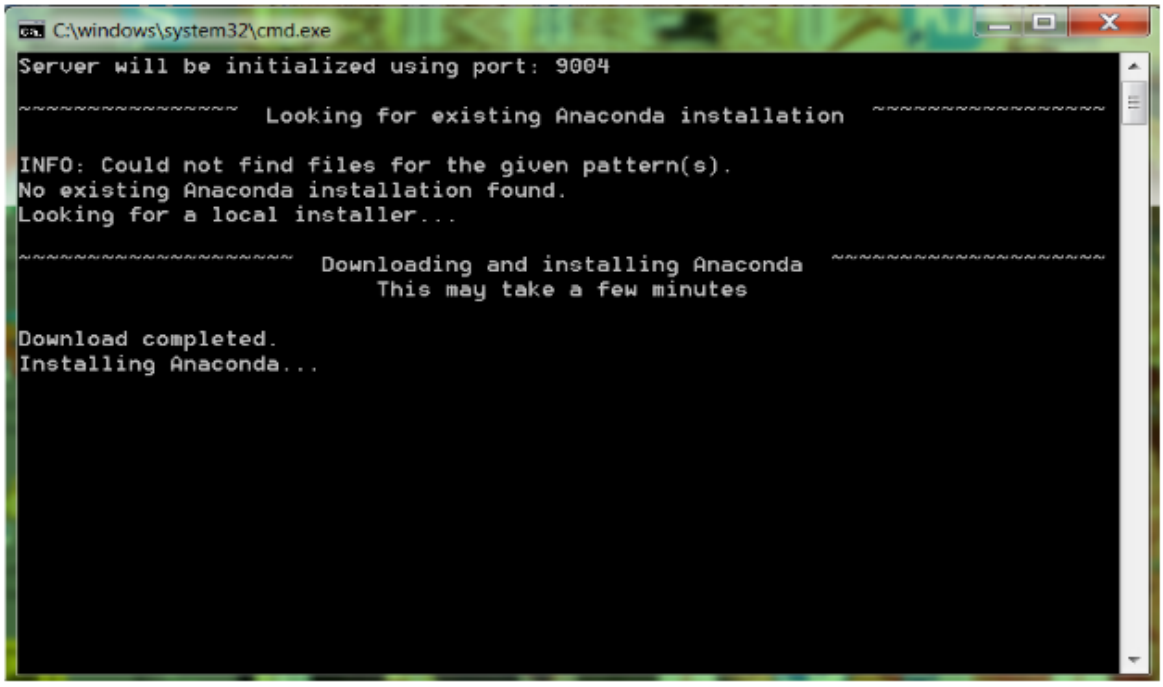
- Within the TabPy-master directory, execute setup.bat (or setup. sh if you are on Mac).
- This script downloads and installs Python, TabPy and all necessary dependencies.
- After completion, TabPy starts up and listens on port *9004*.



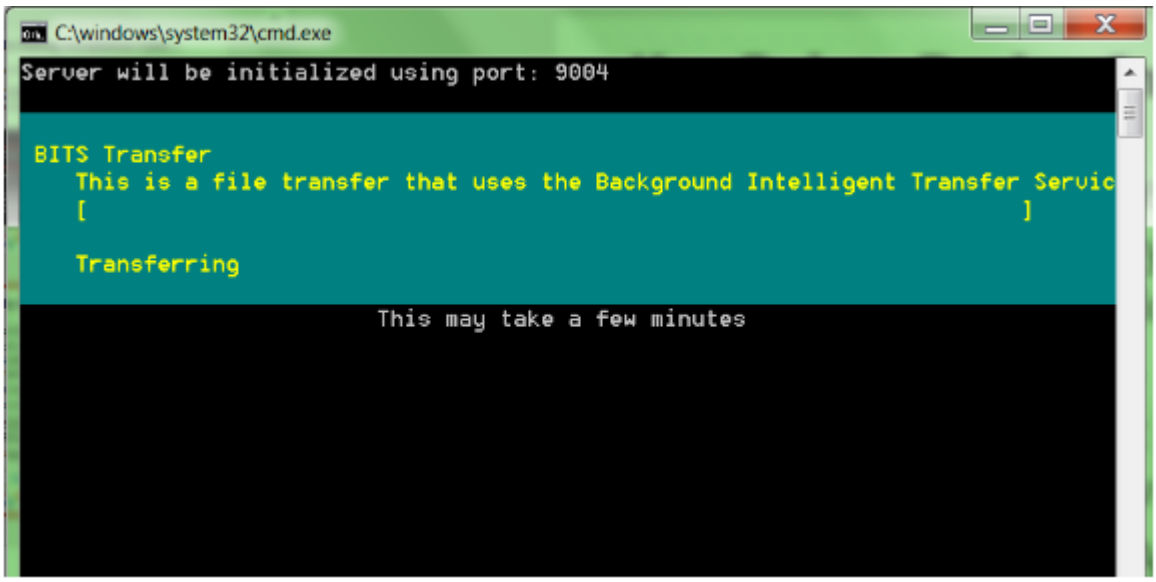
Installation : TabPy installation takes a while and many time you're not successful on your first try.Key Points that needs to be taken care :

- You have Python 3.0 and not the required Python 2.7.
- You might have both versions, but your primary is the 3.0 version.

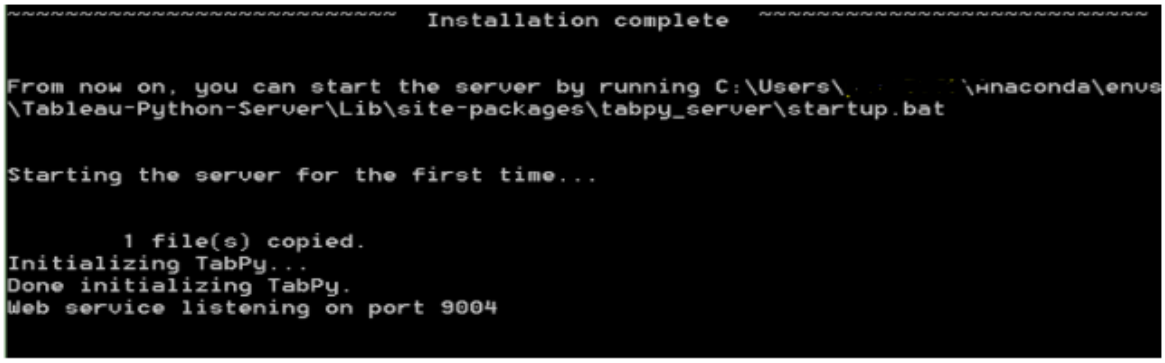
- When you run the python tableau server set up file for the first time , it shows the message installing Anaconda (even if Anaconda is there).
- Sometimes It may take more than hour to get the final confirmation message



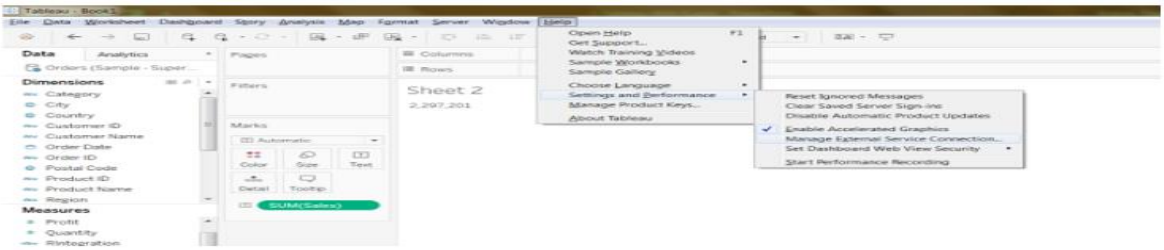
you may also get the below even if you have python installed. Have patience, let it keep running. (can take hours. If it get closed run it again, till you get success message). You can get error, but run the setup file again, till finally it gets installed (Couple of Try running the setup file ,does the trick)



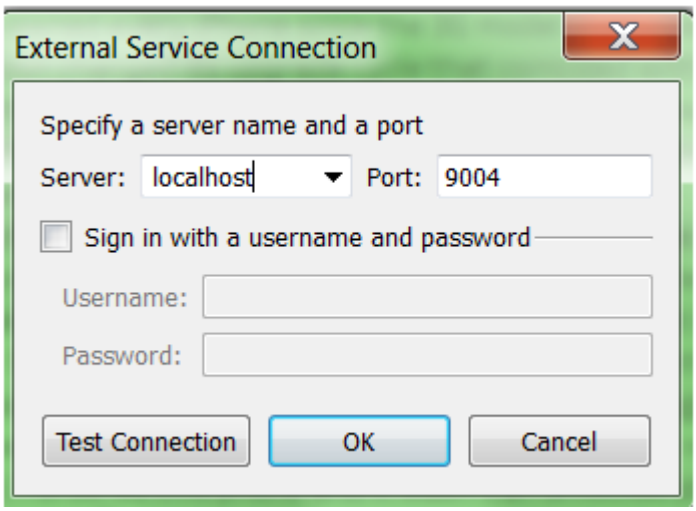
- When you get the below message it means the python server is successfully installed and running fine .
- Also Note the path (highlighted in red below) for starting python server next time or else you will keep doing the same process again and again



Configure a TabPy Connection on TableauOn the Help menu in Tableau Desktop choose Settings and Performance > Manage External Service Connection to open the TabPy connection dialog box.



Enter or select a server name using a domain or an IP address.
The drop-down list includes localhost and the server you most recently connected to.
Specify a port. Port 9004 is the default port for TabPy servers.
Click Test Connection.



Sheet 1 – Coloring the profit

1. Category and subcategory in row field
2. Add sum(profit) to the text
3. Add the calculated field variable (python_tab) to color

```
SCRIPT_BOOL("

lst= []

for i in _arg1 :

    lst.append(i>0)

return lst

",
SUM([Profit])

)
```

Sheet 2 – correlation with profit and sales

1. Add category and sum(profit) in row
2. Add sub_category and sum(sales) in column
3. Go to showme button and change visualization in table form
4. Add calculated field variable in to color (corr)

```
        SCRIPT_REAL("

        import numpy as np

        return np.corrcoef(_arg1,_arg2)[0,1]",
```

SUM([Sales]),sum([Profit])

)

Exercise: 2.6.2020 (online mode)

Go through the below given link and implement the same and Upload the output in Moodle

https://medium.com/@vishal152715/python-tableau-integration-9139bcadaf5
https://towardsdatascience.com/forecasting-with-python-and-tableau-dd37a218a1e5