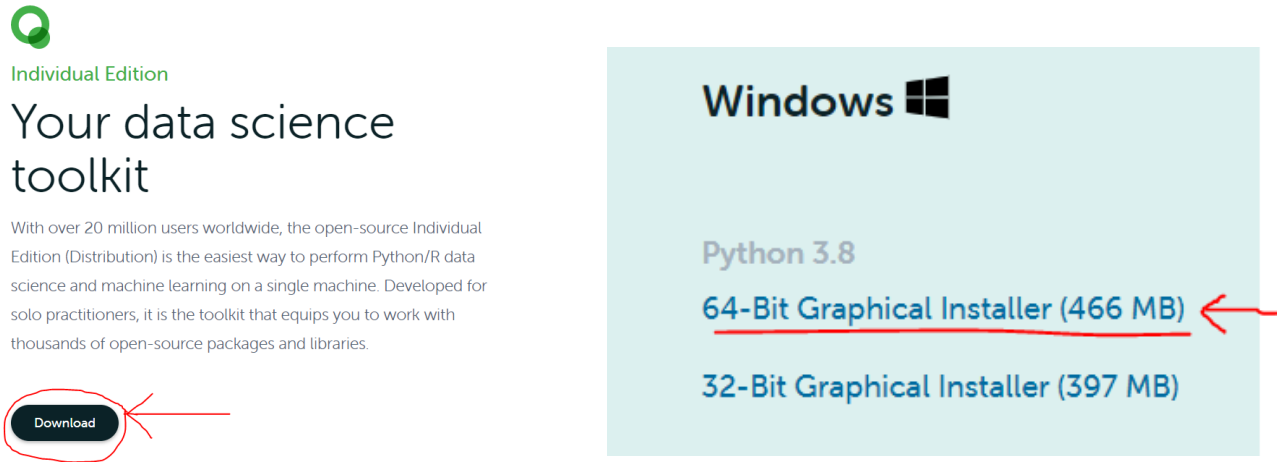
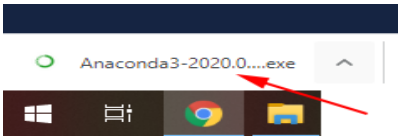
Assignment 2 Guide

Part One: Installation

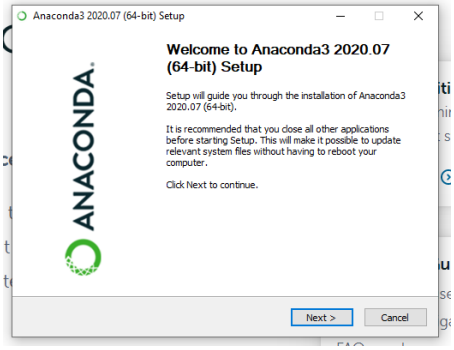
1. Install python 3 (via Anaconda 64 or 32-bit Graphical Installer).
   download link: https://www.anaconda.com/products/individual

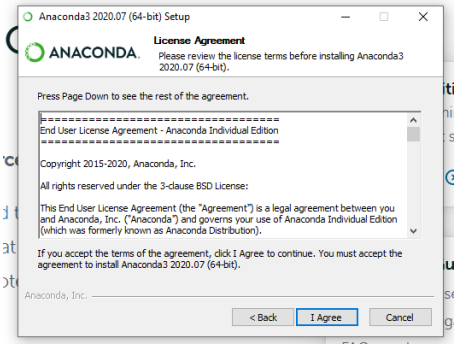


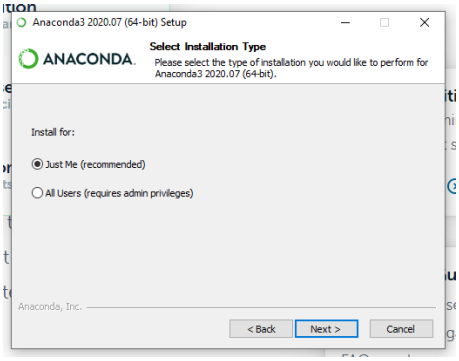
2. Open Anaconda installer

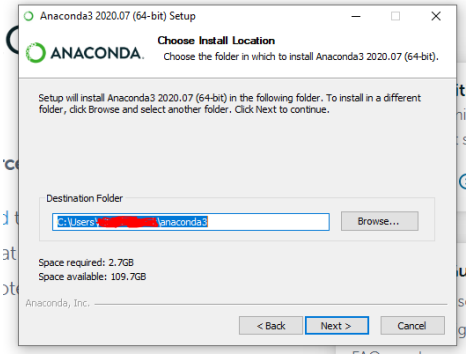


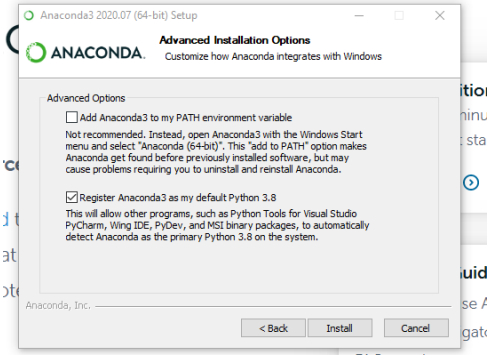
3. Click Next, I Agree, Next, Next, leave check boxes as is and Install.



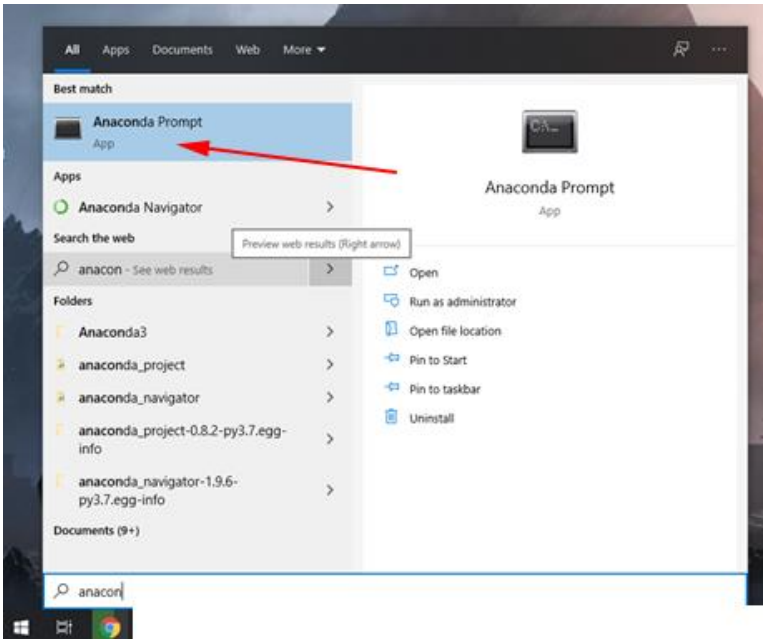




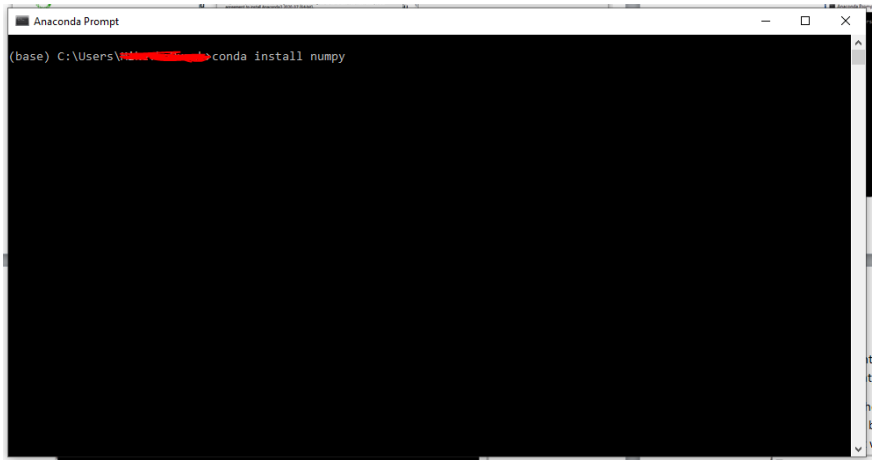




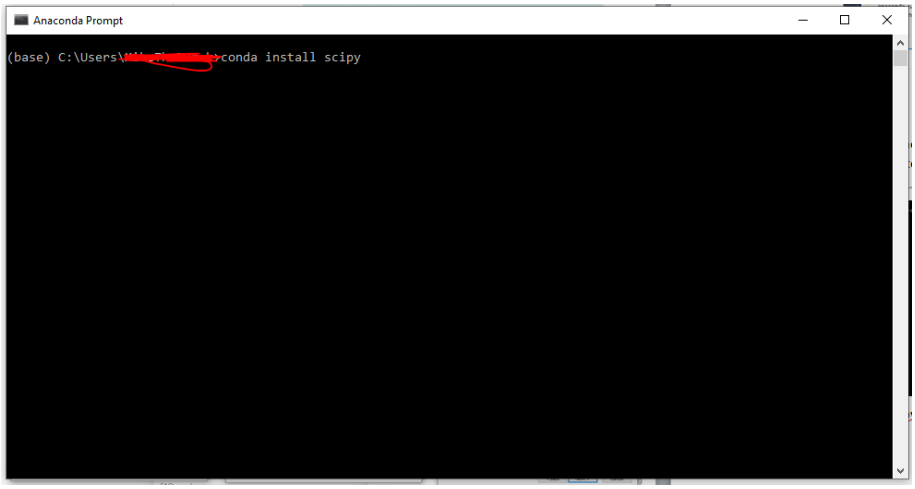
4. Click Start, and open Anaconda Prompt.



5. Installing necessary python libraries: In the terminal, type ‘conda install numpy’, and wait for download and installation to complete.



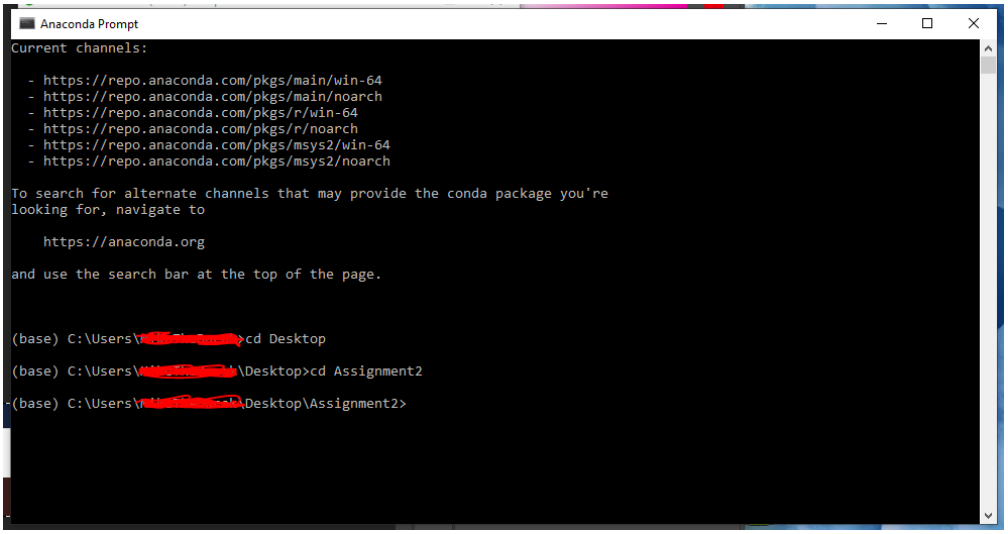
And then ‘conda install scipy’



And lastly, ‘pip install PyLTSpice’

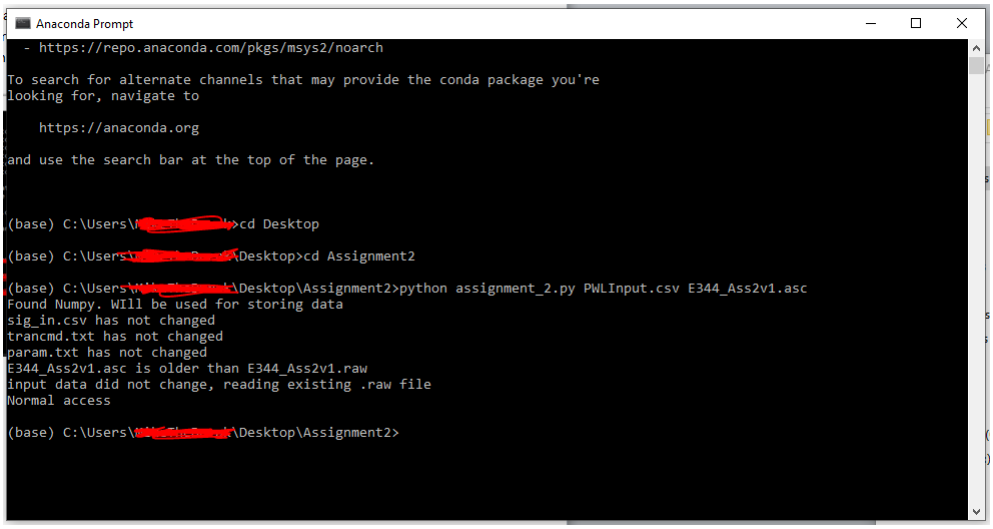
Part Two: Execution

1. Unzip ‘assignment2.zip’ onto desktop. Copy your PWLInput (.csv) file into the SAME unzipped folder which contains ‘assignment_2.py’ , as well as your circuit file (.asc).
2. Change the current directory to the path of the folder on the desktop by typing ‘cd Desktop’ to change path to Desktop, and then ‘cd Assignment2’ to change path to the correct folder.



3. Execute assignment_2.py to simulate the circuit and generate an output. To do this, type ‘python assignment_2.py PWLInput.csv E344Ass2v1.asc’

Where PWLInput.csv should be replaced with the name of your signal input file, and E344Ass2v1.asc should be replaced with your circuit filename. If you get something looking like the following output, it worked.



4. You should find 2 new files in the folder, a plot of the signal input and outputs named ‘figure.png’ and the marker excel file named ‘Output.csv’ containing the output values(timestep, VoutBeatPulses, VoutRateAnalogue) .