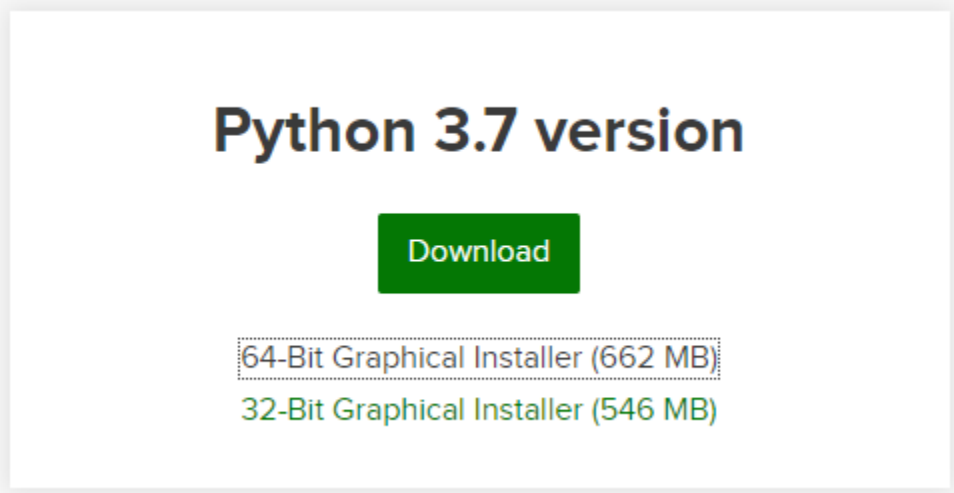
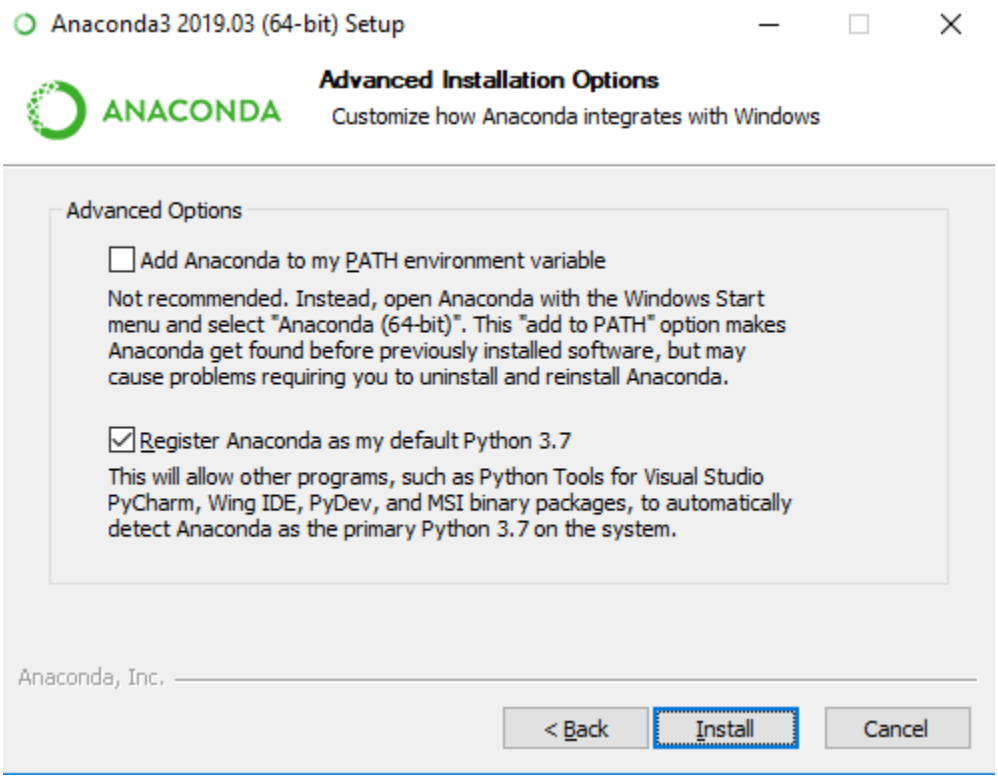
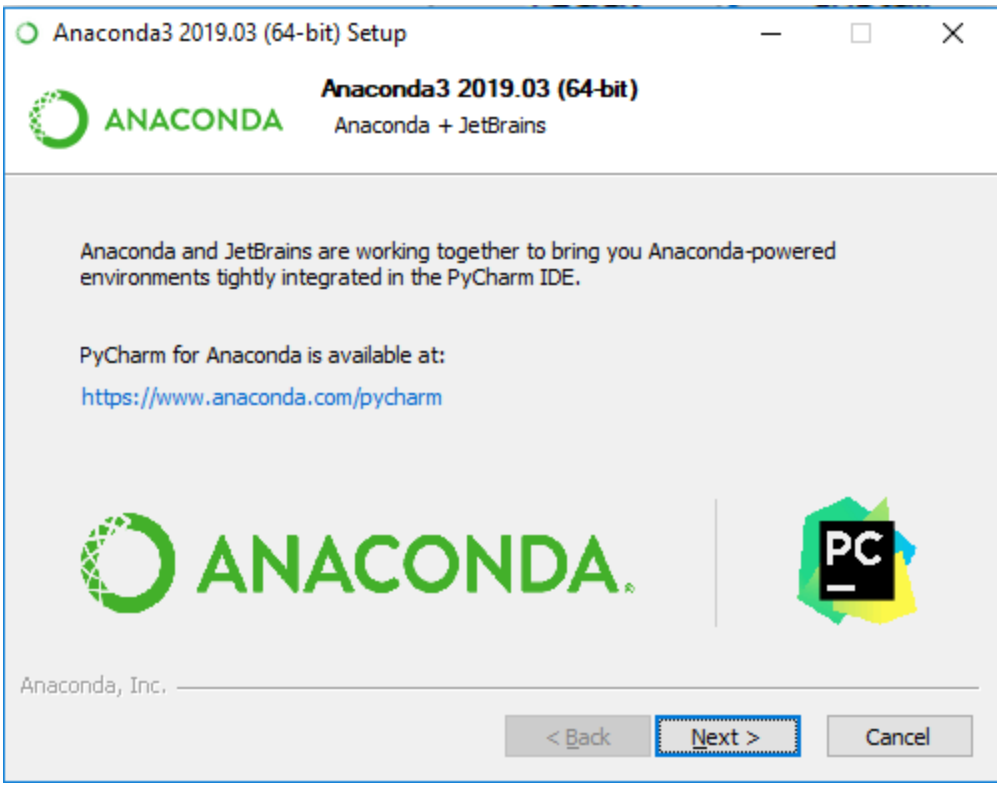
Install Anaconda development IDE:

https://www.anaconda.com/distribution/#download-section





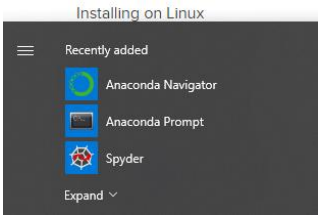


Optional whether you want to install PyCharm, not required. Click Next if you don't.

More information can be found here: https://docs.anaconda.com/anaconda/install/windows/

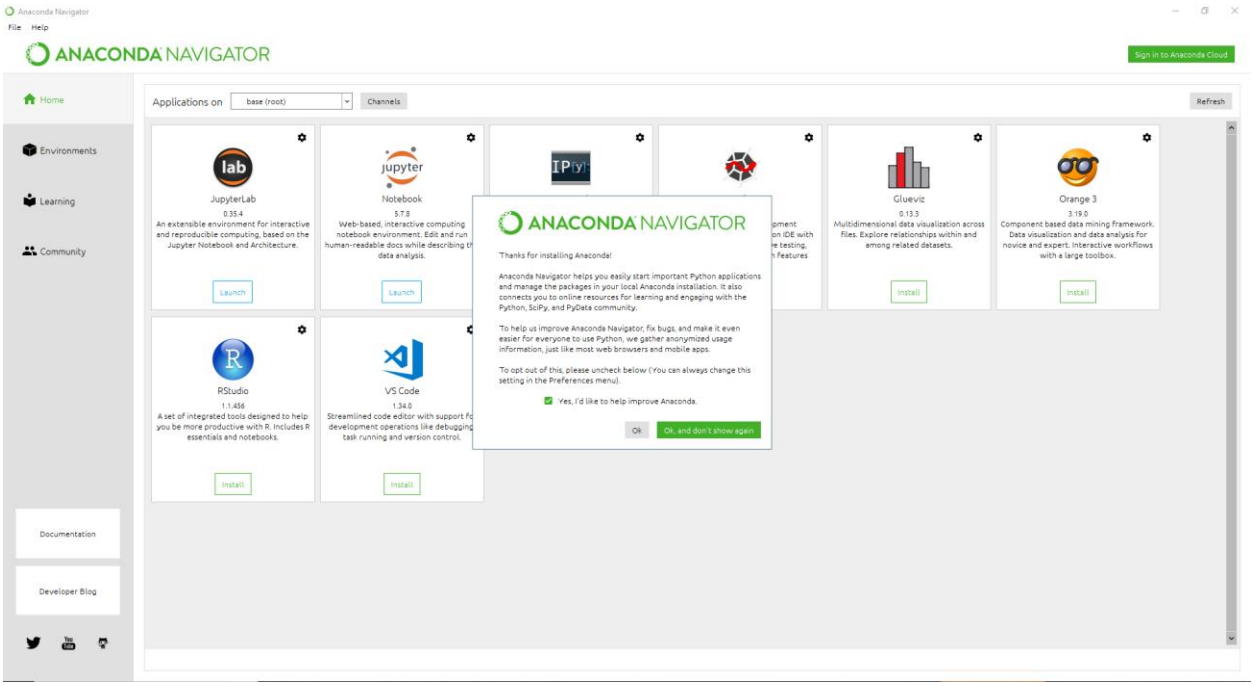
Verification of installation:

Click Start - then from the shortcuts, select Anaconda Navigator. If it opens, you have successfully installed Anaconda.

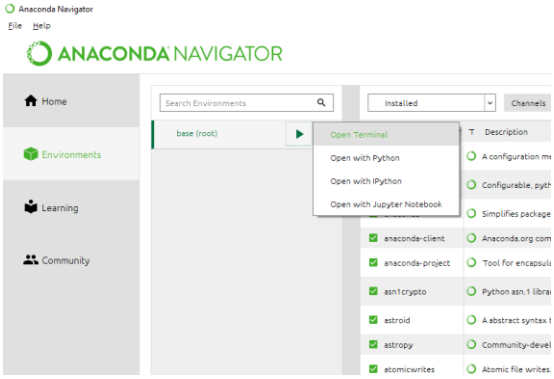


Using Anaconda:

1. Click "Anaconda Navigator"



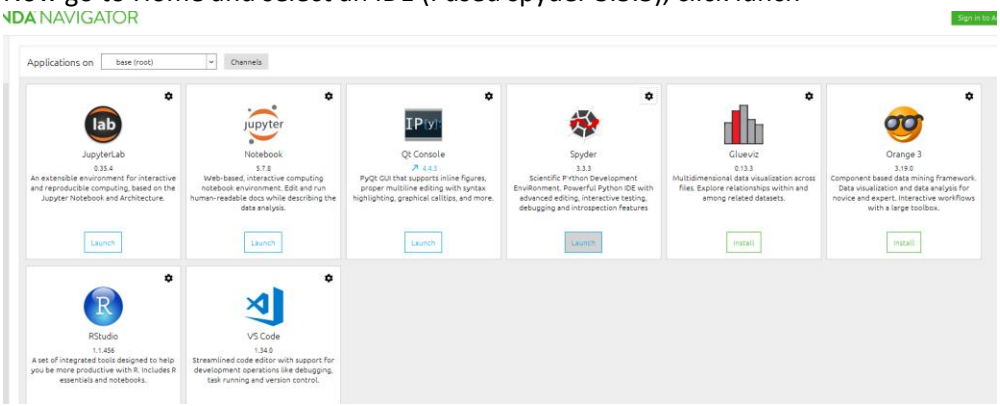
2. Go to Environments from left side and click “play” button then select “Open Terminal”



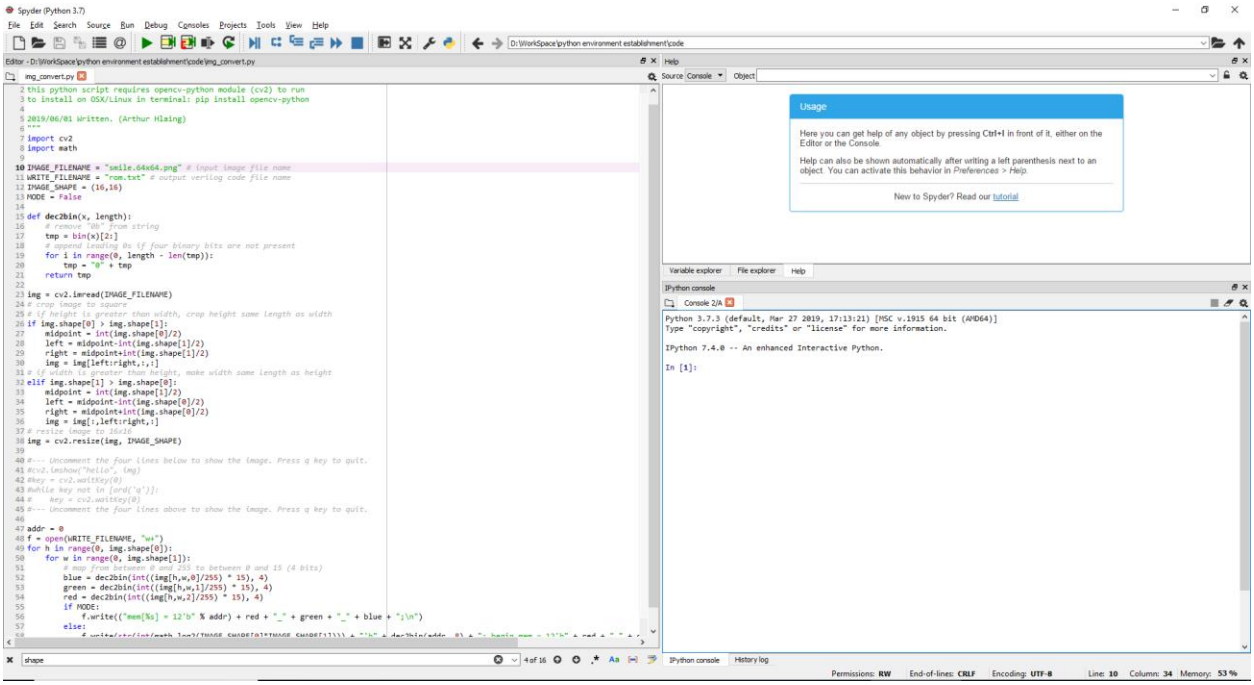
3. In terminal window, type: pip install opencv-python

```
(base) C:\Users\Jason>pip install opencv-python
Collecting opencv-python
  Downloading https://files.pythonhosted.org/packages/a3/50/04d0669afe884f137c2f490642756e8c4a658254300a9eaf253d1e643085/opencv_python-4.1.0.25-cp37-cp37m-win_amd64.whl (37.3MB)
    100% |████████████████████████████████| 37.4MB 450kB/s
Requirement already satisfied: numpy>=1.14.5 in d:\applications\anaconda3\lib\site-packages (from opencv-python) (1.16.2)
Installing collected packages: opencv-python
Successfully installed opencv-python-4.1.0.25
```

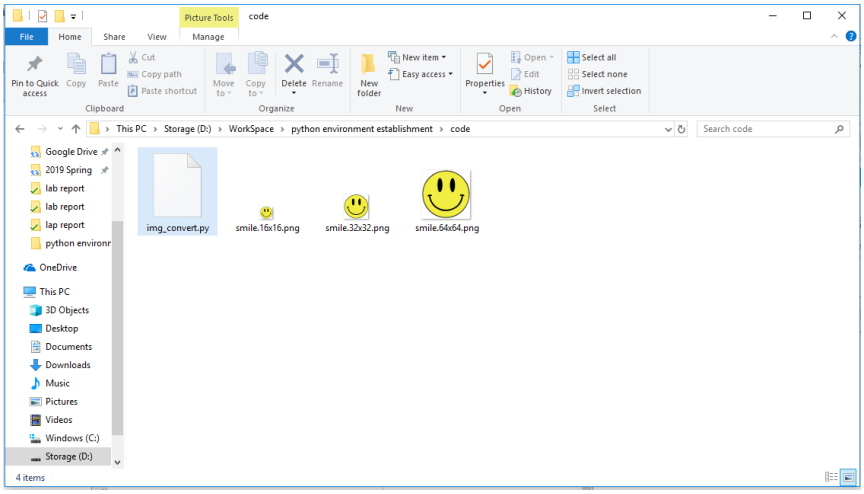
4. Now go to Home and select an IDE (I used spyder 3.3.3), click lunch



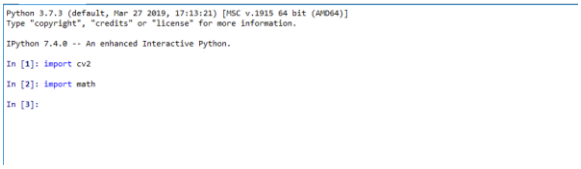
5. In your IDE window, open img_convert.py you downloaded from class website and it should look like this.



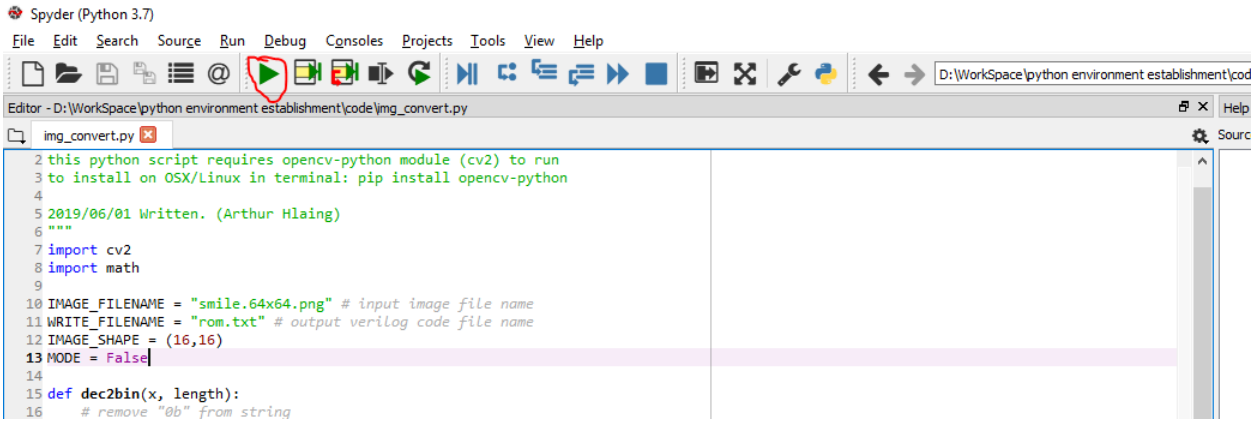
6. In order to get rom.txt file, you should put your images in the same folder where you save img_convert.py.



7. Then in your IDE window, change the value of variable “IMAGE_FILENAME” (line 10) to the img you are trying to convert. And also in your console (right lower coner), import required library.



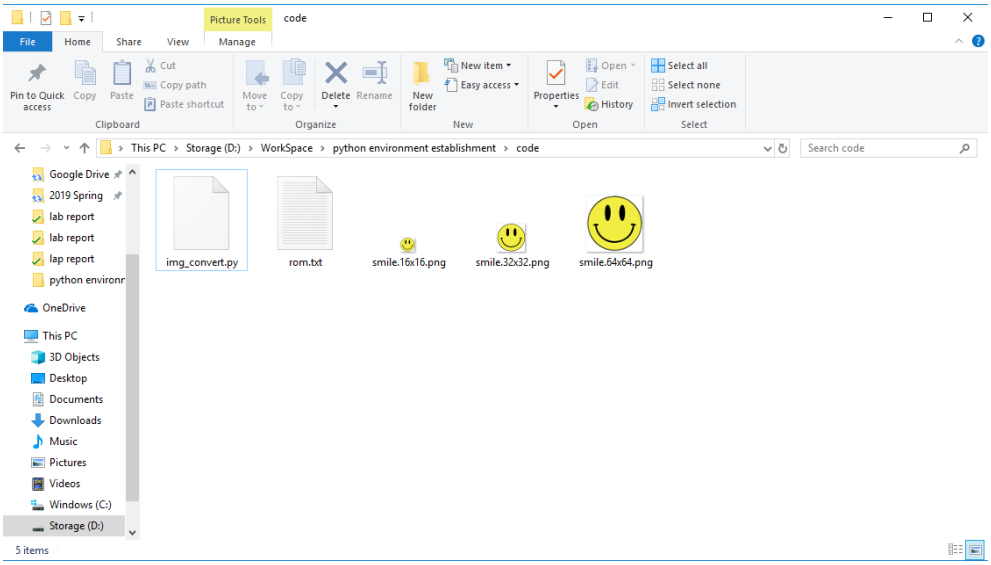
8. Now click “run” button and you will get your rom.txt at the folder where you save your files.



Your console should show this:

```
Python 3.7.3 (default, Mar 27 2019, 17:13:21) [MSC v.1915 64 bit (AMD64)]
Type "copyright", "credits" or "license" for more information.

IPython 7.4.0 -- An enhanced Interactive Python.

In [1]: import cv2

In [2]: import math

In [3]: runfile('D:/WorkSpace/python environment establishment/code/img_convert.py', wdir='D:/WorkSpace/python environment
establishment/code')

In [4]:
```

Your folder should have this:



Disclaimer:

This instruction is not official Anaconda document.

For using img_convert.py, please read the instruction posted on class website.