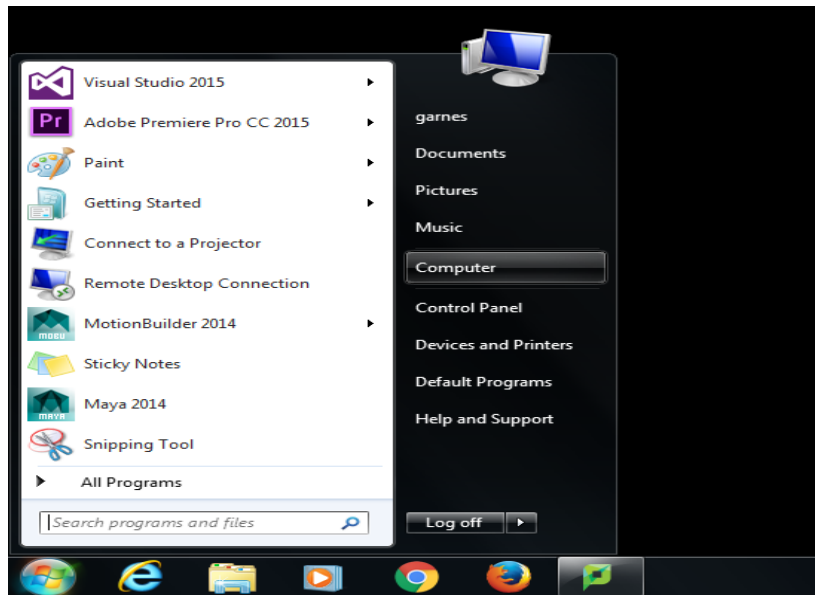


Before attempting to run homework 3 make sure you have the code saved and have the butterfly image saved in the same place as the homework 3 code.

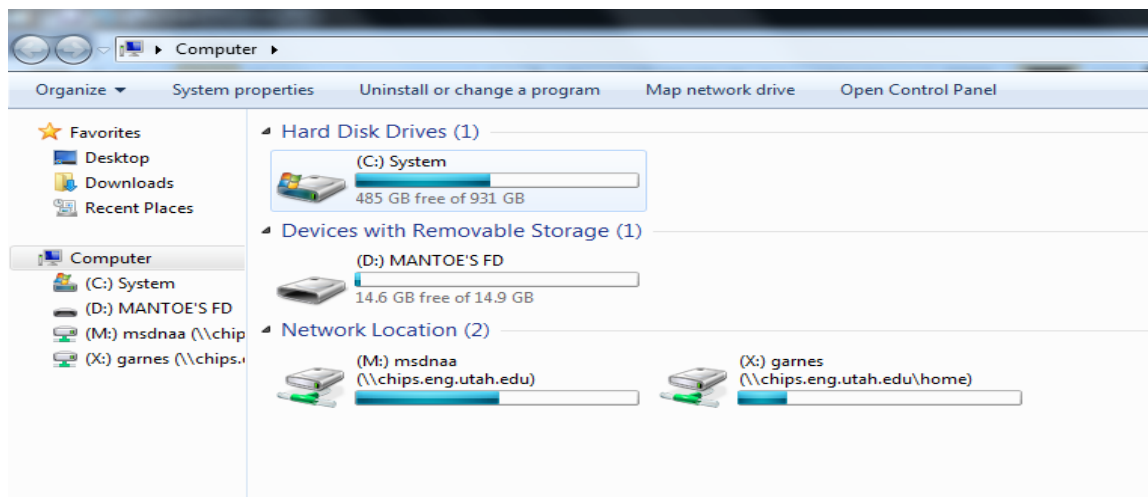
How to Run Homework 3 in the Cade Lab

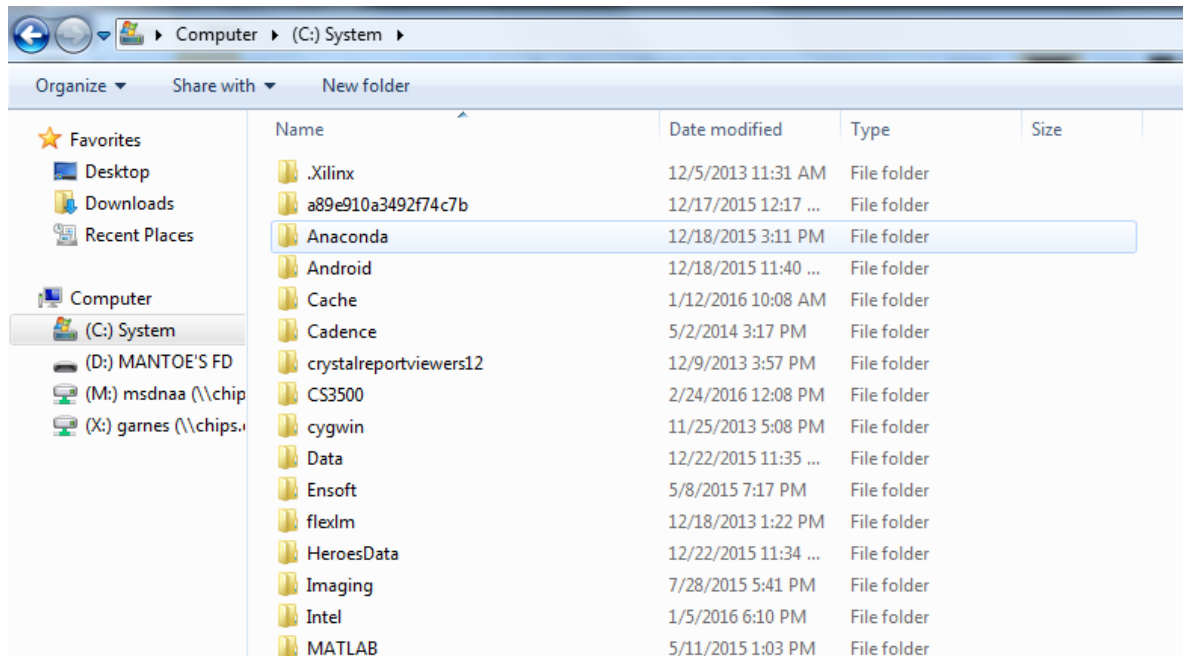
From the main desktop click on the start button and click on the



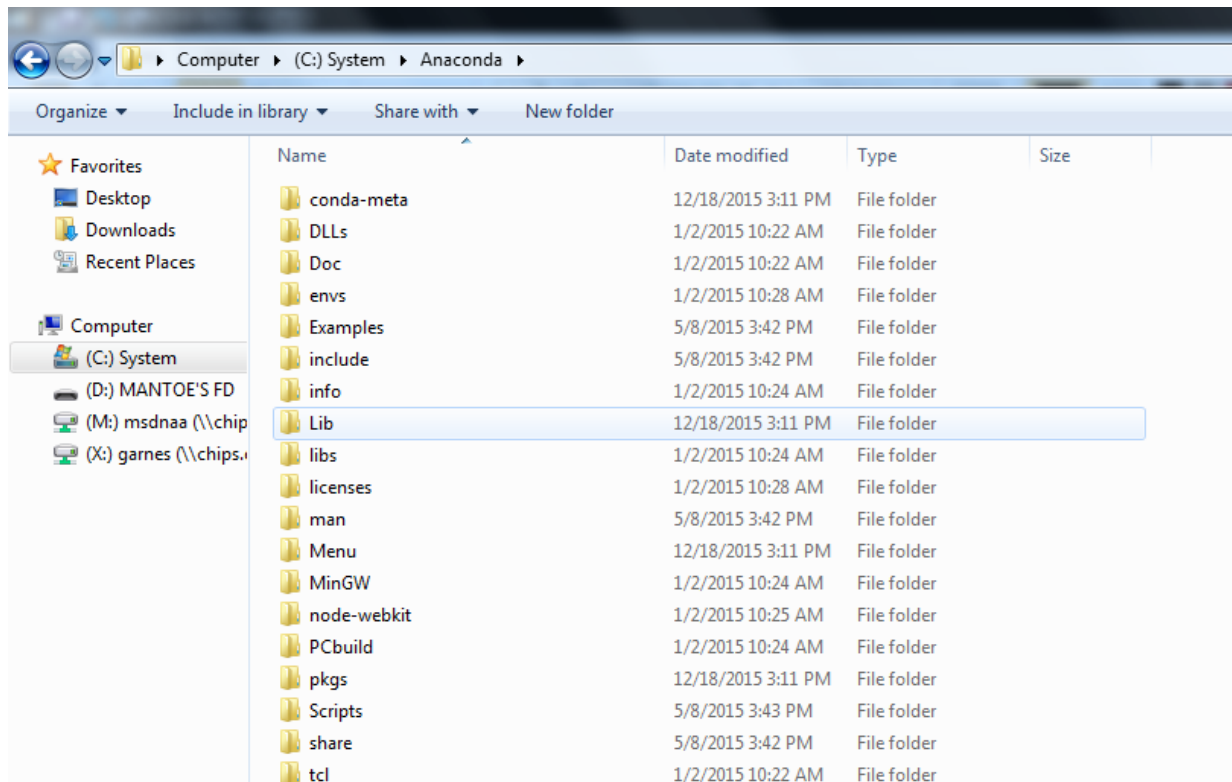
“computer” button on the right hand side.

Once that opens double click on “(C:) System”



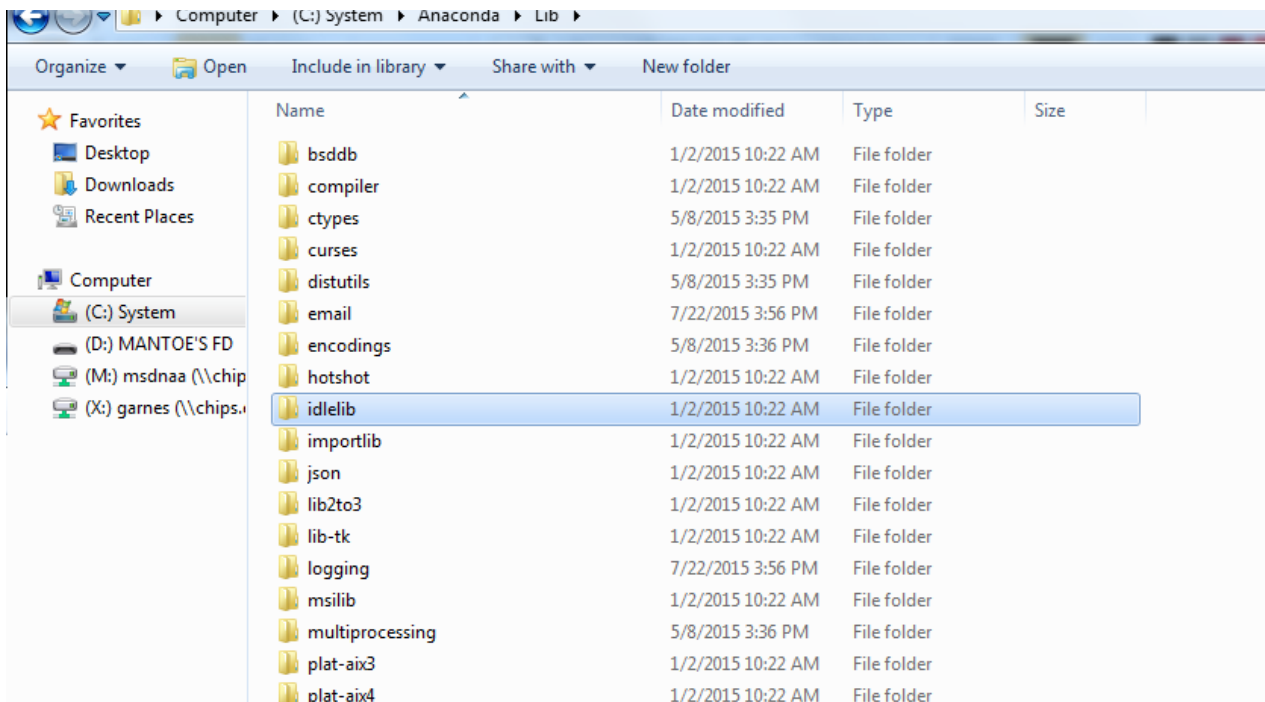


Once that opens double click on the “**Anaconda**” folder

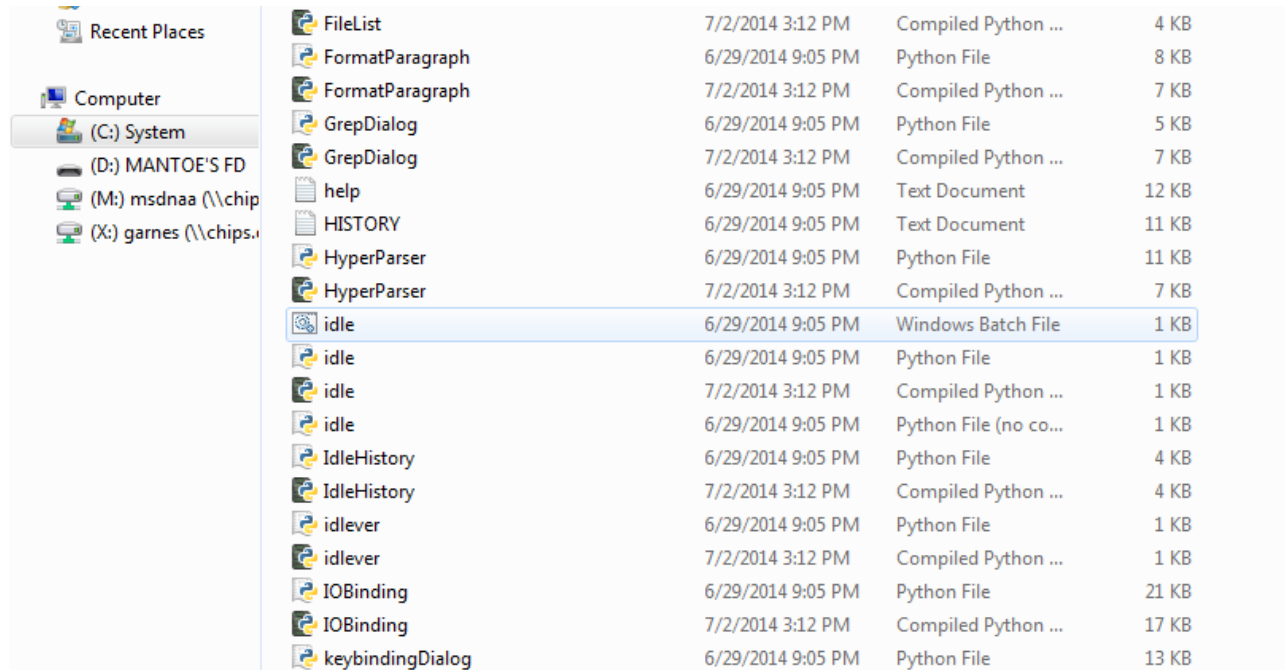


Once that opens double click on the “**Lib**” folder

Once that opens double click on the “**idlelib**” folder

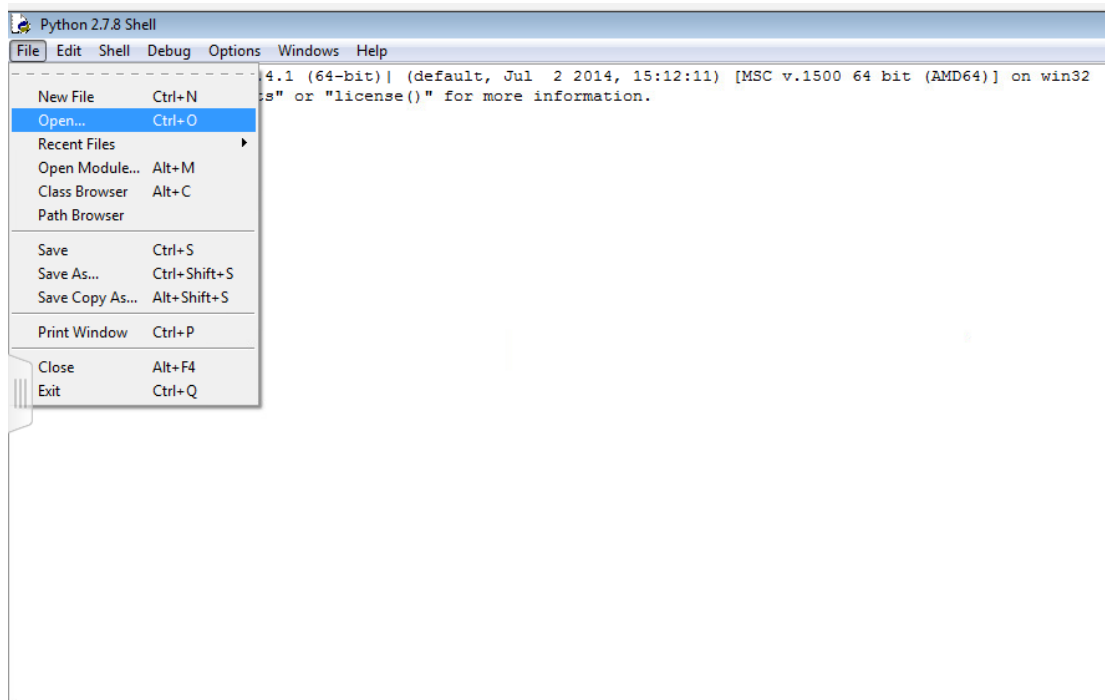


In this folder double click on the program called “idle” to open it, and make



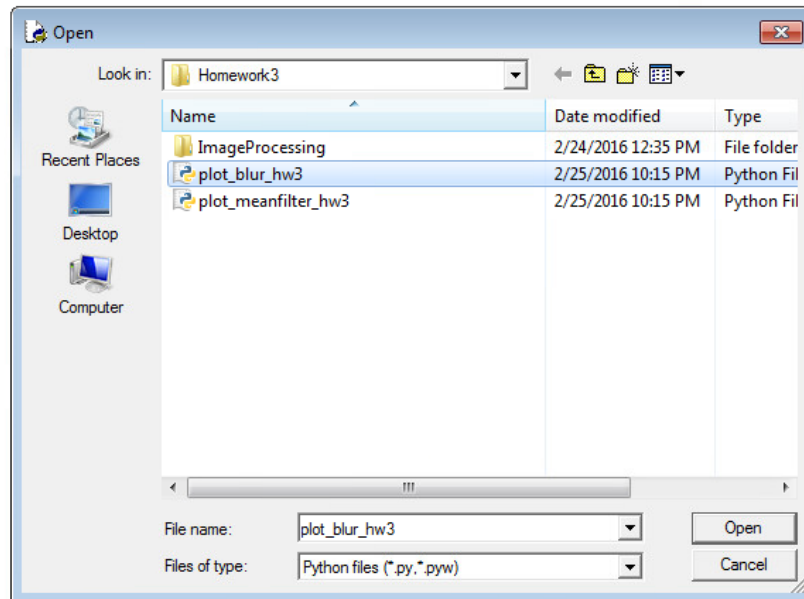
sure the file type is a “**Windows Batch File**”

A white window called a “**Python 2.7.8 Shell**” should open up. Use this



shell to open up homework 3.

Navigate to the file location of the homework 3 assignment and double click on it to open it.



The code for the file will open up. To run the code click on the run button

```
Python 2.7.8: plot_blur_hw3.py - X:\Documents\cs_1060\Homework3\plot_blur_hw3.py
File Edit Format Run Options Windows Help
"""
Blurring of im
=====
An example showing how to use ndimage.gaussian_filter to blur an image.
Code modified from:
http://www.scipy-lectures.org/advanced/image_processing/
"""

import scipy.misc as misc
from scipy import ndimage
import matplotlib.pyplot as plt

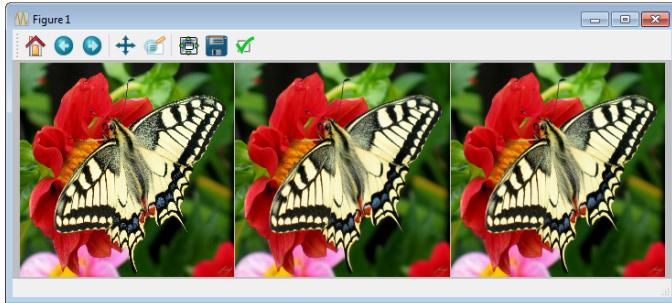
# read image from a jpg file
face = misc.imread('butterfly.jpg')

"""
Try different sigma parameters, the larger, the more blurry it becomes
Change my_sigma1 and my_sigma2 such that the middle and the right images are progressively more blurry than the left image
"""
my_sigma1 = 1
my_sigma2 = 1
blurred_face = ndimage.gaussian_filter(face, sigma=(my_sigma1, my_sigma1, 0))
very_blurred = ndimage.gaussian_filter(face, sigma=(my_sigma2, my_sigma2, 0))

plt.figure(figsize=(9, 3))

plt.subplot(131)
plt.imshow(face, cmap=plt.cm.gray)
plt.axis('off')
plt.subplot(132)
plt.imshow(blurred_face, cmap=plt.cm.gray)
plt.axis('off')
plt.subplot(133)
plt.imshow(very_blurred, cmap=plt.cm.gray)
```

at the top of the program and then click **“Run Module”**



The code should run and will open up a program that displays the images