Introduction to Machine Learning - COS 324

Programming Assignment 1

Due date: 11:59pm on 21st Feb. Electronic submisisons only.
***Submit** your assignment here*

IMPORTANT:

1. Consulting with other students from this course is allowed. If you do so, clearly state whom you consulted with for each problem separately.
2. Searching the internet or literature for solutions is **prohibited**.

The purpose of this exercise is to warmup your coding skills by focusing on B.O.W. You'll need to install Python 3 (and packages like numpy, matplotlib, jupyter) before you begin. Here is how one might install numpy for instance:

```
$ pip install numpy
```

We recommend, but not require, that you install Anaconda that installs both Python and the required packages. Click here or here to learn the difference between Anaconda and a bare minimum Python distribution.

After you are done installing the prerequisites, unzip the assignment file pa1.zip and run the jupyter notebook.

```
$ jupyter notebook pa1.ipynb
```

The notebook contains instructions on how you must proceed. Here is a useful summary: there are 15 action prompts; each action prompt is marked with a sequence number and the token **ACT**. Most of prompts are answerable in 5 lines of code or less:

```
np.argmin(err_list)
```

(This is, in fact, an answer to one of the prompts.)

Any changes made to the notebook (the substitution of prompts, the output of execution) can be saved by selecting the appropriate option in the notebook toolbar.

Once you have completed all prompts and executed all cells, save the notebook. At this point, it'll contain your answers and the output produced. You're required to submit the file *pa1.ipynb* to the course dropbox.