Kerry Ojakian's CSI 31 Class
Due Date: Tuesday September 19 by 11pm

HW #1

General Instructions:

- Each question below should be a separate file whose name indicates the problem number (for example problem1.py, problem2.pdf, etc). Programs should be .py files and response questions .pdf files (indicated at each problem).
- Your programs should run!
- Remember that you have signed a class agreement not to copy from others or from the web.

The Assignment

1. *(PDF File)* Make a trace of the following program, using the line numbers #1, #2, etc. Also, indicate exactly what it prints. And finally, draw 2 neat flowcharts - one for each conditional statement.

```
x = 7           #1
if x > 4:       #2
    x = x + 1   #3
    print(x)    #4
elif x == 7:    #5
    x = 2       #6
    print(x)    #7

if x == 7:      #8
    x = 9       #9
elif x > 8:     #10
    x = 0       #11
else:           #12
    x = 85      #13

print(x)        #14
```

2. *(PDF File)* Sweigart Book Chapter 1 exercises: 2, 6, 7, 10.

3. *(PDF File)* Make a trace of the following program, using the line numbers #1, #2, etc.

```
x = 5       #1
y = 6       #2
x = x + 6   #3
y = x       #4
y = 3*y     #5
x = 0       #6
x = x*y     #7
```

4. *(PY File)* A certain CS professor gives five-point quizzes that are graded on the scale 5-A, 4-B, 3-C, 2-D, 1-F, 0-F. Write a program that accepts a quiz score as an input and uses a decision structure to calculate the corresponding grade.

5. *(PY File)* Write a program that gets 3 integers from a user and responds by indicating if there are more even or more odd integers.

6. *(PY File)* Write a Mad-Libs program: The program should prompt the user for a number of words (with prompts like "noun", "verb", "number", etc). And then it produces a paragraph with those words inserted (to get your starting paragraph, one approach is to copy one from any source and remove various nouns, verbs, etc.)

   I will give clarifying detail on this in class. Also, for this question you may work with others in class to hand in the same program (in this case, at most THREE people in a group; and you must all put the a copy of program in your Dropbox with all group member names indicated)