Fall 2017: CSCI 220L

Directed Activities: After each activity demonstrate your work for the instructor.

Question 01) Hurricane. Write a function 'hurricane()' that asks the user for the wind speed (in miles per hour) as a whole number and prints whether it qualifies as a hurricane or not; and if so, whether it is a Category 1, 2, 3, 4, or 5 hurricane.

Below is a table of the wind speeds according to the Saffir-Simpson scale.

Category 1	Wind Speed (mph) 74 - 95
2	96 - 110
3	111 - 129
4	130 - 156
5	157 and above

Question 02) Maximum and minimum of three values. Write a function 'printMaxMin ()', that asks the user for three values, then prints the maximum and minimum values as follows:

```
The max value amongst the three is: <highest value>
The min value amongst the three is: <lowest value>
```

Question 03) Five per line. Write a function 'fivePerLine()' that, using one for loop and one if statement, prints the integers from 1000 to 2000 with five integers per line. Hint: use the % operator.

^{*}Recall that if you do the following: print("something", end=""), Python will print "something" and the cursor will stay on the same line (instead of going to the next line, which what would happen by default). Also, if you write print () by itself, Python will go to the next line.

Fall 2017: CSCI 220L

Question 04) <u>Guess the number</u>. Write a function 'guessNumber()' that first generates a random number from 1 to 100 and stores it in 'myRandom'.

Then, ask the user to guess the number. If the number given by the user is greater than 'myRandom', print 'Go lower!', and ask for another number; if the number given by the user is less than 'myRandom', print 'Go Higher!', and ask for another number; once the user input is equal to 'myRandom', print 'You Win!'.

Give the user only 5 trials to guess what the number is (use a loop for that), if the user wasn't able to guess the number using 5 trials, print 'You Lose!'

Question 05) <u>Gymnastics judging</u>. A gymnast's score is determined by a panel of 6 judges who each decide a score between 0.0 and 10.0. The final score is determined by discarding the high and low scores, and averaging the remaining 4. Write a Python function 'gymnasticsScore()' that takes 6 numbers from the user representing the 6 scores and prints their average, <u>after throwing out the high and low scores</u>.

Use a loop to ask the user for the 6 values.

Upload the files to OAKS under the Assignments section.

Remove any files and folders you created on the desktop. Then empty your recycle bin. Log out of your Cougars account.

Log off of the computer you are using.