Fall 2017: CSCI 220L

<u>Directed Activities</u>: Demonstrate your work for the instructor after each activity.

<u>Learning Objectives</u>: Develop Python programs that utilize while loops; and 'chr()' and 'ord()' built-in functions

Question 01) <u>Sum of Indefinite Numbers</u>. Write a function 'sumOfNums()' that will keep asking the user for numbers. As soon as the user inputs the number 0, quit the loop and print the sum of all the values entered by the user.

Question 02) <u>Average of Indefinite Numbers</u>. Write a function 'averageOfNums()' that will keep asking the user for numbers. As soon as the user inputs the number 0, quit the loop and print the average of values entered by the user.

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Question 03) <u>Random Password</u>. Write a function 'randPass()' that will generate a random password by generating one (lower-case) letter in each iteration in a while loop. You should quit your loop and print the password once the random letter generated is 'e' (ASCII code 101).

For example, say your code generated the random letter 'b' in the first iteration, your loop will continue; say your code generated the random letter 'z' in the 2nd iteration, your loop will continue; now say that your Python code generated the random letter 'e' in the 3rd iteration, your loop should stop now and you should print 'bze' as the password.

<sup>\*</sup>Use the two built-in functions 'chr()' and 'ord()'

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Question 04) <u>Caesar Cipher</u>. Write a function 'caesarCode()' that will ask the user to input a word, letter by letter (user inputs a letter then hits enter, so on and so forth; until user enters the number 0, which will be used to terminate the loop and stop asking the user for more letters). Then print the word after adding 2 ASCII numbers to every character given.

For example, if the user enters the word 'Hello' (character by character, followed by 0), then you should print the word 'Jana,' since:

- The ASCII code for the 1st character 'H' is 72, we add 2 and we end up with 74, the letter corresponding to the ASCII 74 is 'J'
- The ASCII code for the 2nd character 'e' is 101, we add 2 and we end up with 103, the letter corresponding to the ASCII 103 is 'g'
- ....so on and so forth

*Use the two	built-in functions	'chr()' and	'ord()'	

Question 05) (Y)es or N(o). Write a function 'yesNo()' that will ask the user whether he/she likes ice cream or not. If the user answers 'Y' or 'Yes', then print 'Great!', if the user answers 'N' or 'No', then print '-\_-'; if the user enters anything else, then ask the question again.

\*Keep asking the question until the user enters any of these answers: 'Y', 'Yes', 'N', or 'No'.

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.