

CSC 4992
Section 002
Special Topics in Computer Science
Python Programming
Winter Term 2018
Assignment 02
50 points
Due 03/5/2016 (11:59 P.M.)

Submit one source file (.py) for all the questions.

Problem 1 (25 points)

In cryptography, a Caesar cipher, also known as Caesar's cipher, the shift cipher, Caesar's code or Caesar shift, is one of the simplest and most widely known encryption techniques. It is a type of substitution cipher in which each letter in the plaintext is replaced by a letter some fixed number of positions down the alphabet. For example, with a left shift of 3, D would be replaced by A, E would become B, and so on.

Caesar cipher

Encrypt an input string of lowercase letters (plaintext, first input) and prints the result. The other input is the distance value (distance).

Problem 2 (25 points)

Write a Python program to count

- 1) the frequency of words in a file (hint: use Counter module)
- 2) the sentences
- 3) the words