Assignment 1

The messages must be decoded/sent by September 11th (Due 9-11)

The Gauls march on Rome and will arrive by September 11th and cutoff communication.

Caesar's Cipher

Note: This text was encoded in Times New Roman

Ancient Rome is under attack from the Gauls! You have been transported back to ancient Rome and find yourself there with a laptop. Caesar's armies have been sending back a stream of messages to the capital using heliographs but the scribes aren't able to decode them fast enough. Your task is to take Caesar's Cipher and program it in Java so that the Senate can both read messages from Caesar to send reinforcements to help and to write messages so that Caesar can be advised about the impending attack. Write the program, translate the messages, save Rome, save Western Civilization, save the dressing! Rome depends on you!

Thankfully some of the scribes have completed some of the messages and have a general principle for completing the solution. We call this an **Algorithm**: A scribe hands you an example and then explains the principle:

1) Encoded Message : "DXRIPFKPTFPPMXPP" Day of the Month = 3rd Day
    a. Decoded Message : "GAULSINSWISSPASS"

"Caesar's cipher works as follows. If you see a letter, advance *n* number of places down the alphabet and replace it with that letter where n is the day of the month % 15. Do so for all letters to decode the message. Do the opposite to encode letters into a message." – *Gaius Cicereius*

Write two programs one to encode messages, one to decode messages. Be sure to write two mains and don't write any methods.