## Worksheet 09

- 1. Write a function gives a string input, Counts all lower case, upper case, digits, and special symbols
- 2. Write a function converts a long phrase to its acronym
- **3.** Write a function gives a phrase, counts the occurrences of each word in that phrase.
- 4. Create an implementation of the rotational cipher, also sometimes called the Caesar cipher.
  - Write a function gives a plain text and key, returns the cipher text
  - Write a function gives a cipher text and key, return the plain text

The **Caesar cipher** is one of the earliest known and simplest **ciphers**. It is a type of substitution **cipher** in which each letter in the plaintext is 'shifted' a certain number of places down the alphabet. For example, with a **shift** of 1, A would be replaced by B, B would become C, and so on.