CiC Lab 5: *String manipulations*

**Problem 1:**

The Hamming distance between two binary strings of equal length is the number of substitutions required to make them identical. So for example:

s1 = ‘1 0 0 1 1’

s2 = ‘1 0 1 0 0’

hamming\_distance(s1, s2) = 3

because the strings differ at three specific spots. Write a function in Python that computes the Hamming distance between any two strings (not just binary).

**Problem 2:**

In your last assignment you wrote a program that involved palindromes. Write a function in Python that determines if any string of any length is a palindrome. Be as efficient as you can.