# Assignment Questions

1)Reverse String:

Write a function that reverses a string. Do it in-place without using extra space.

2)Valid Palindrome:

Given a string, determine if it is a palindrome, considering only alphanumeric characters and ignoring cases.

3)First Unique Character in a String:

Given a string, find the first non-repeating character in it and return its index. If it doesn't exist, return -1.

4)Most Common Word:

Given a paragraph and a list of banned words, return the most frequent word that is not in the list of banned words. It is guaranteed there is at least one word that isn't banned, and that the answer is unique.

5)Detect Capital:

Given a word, you need to judge whether the usage of capitals in it is right or not. We define the usage of capitals in a word to be right when one of the following cases holds:

All letters in this word are capitals.

All letters in this word are not capitals.

Only the first letter in this word is capital.

6)Find All Anagrams in a String:

Given a string s and a non-empty string p, find all the start indices of p's anagrams in s.

7)String Compression:

Given an array of characters, compress it in-place such that each character is followed by its frequency. The length after compression must always be smaller than or equal to the original array.

8)Valid Anagram:

Given two strings s and t, return true if t is an anagram of s, and false otherwise.

9)Longest Common Prefix:

Write a function to find the longest common prefix string amongst an array of strings. If there is no common prefix, return an empty string "".

10)Word Pattern:

Given a pattern and a string s, find if s follows the same pattern. Here, "follows" means a full match, such that there is a bijection between a letter in pattern and a non-empty word in s.