



Problem Set:	Assignment: A01	Semester:	Spring 2019
Points:	10		
Date Set:	See SLATE	Due Date:	See SLATE
Course:	CS217 - OOP	Instructor:	Dr. Nauman

1 The Search for a Character

Since you are reading this, you have already downloaded and extracted the zip file.

1.1 Tasks to do

1. Take a look at the starter file. As you can see, a call is being made to the `index` function.
This function should take in a character pointer (which is the starting location of a string). It should also take in a character as a parameter. The function should search for this character within that string.
 - (a) If the character is found, it should return the index of that character (0-based)
 - (b) If the character is not found, it should return -1
 - (c) If the character is found more than once, it should return the index of the first occurrence
2. The second function you need to write is `count_digits`. This should again take in a character pointer (which is the starting location of a string) and count the number of digits in that string. Note that in ASCII, digits go from 48 to 57.
3. A **strict requirement** is that you cannot use the index operator – `[]` – to access the characters of the string in either of the functions. You must use a pointer and move that pointer to different characters within the string to perform search and count.
4. After you're done making your code work, write down (**read: assignment must be hand-written**) the full declaration and definition of both the functions **on a paper** and submit that on or before the deadline. Late assignments (or soft copies) will not be accepted.