COSC 2336

Programming Fundamentals III

Fall, 2019

Using Pointers

Program 3. (*Occurrences of each digit in a string*) Write a function that counts the occurrences of each digit in a string using the following header:

**int**\* count(**const** string& s)

The function counts how many times a digit appears in the string. The return value is an array of ten elements, each of which holds the count for a digit. For example, after executing int\* counts = count("12203AB3"), counts[0] is 1, counts[1] is 1, counts[2] is 2, counts[3] is 2.

Write a main function to display the count for "SSN is 343 32 4545 and ID is 434 34 4323".

Redesign the function to pass the counts array in a parameter as follows:

**void** count(**const** string& s, **int** counts[], **int** size)

where size is the size of the counts array. In this case, it is 10.