HOMEWORK 1

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Points: 30

Assigned: 1/8/2018
Due: 1/24/2018

GOALS

- To use basic C++ operations, conditions statements, loops and arrays

PROBLEM 1 (NUMBER ANALYSIS)

Tom is trying to count the number of positive, odd and zeroes from a given set of 15 integers. He is also trying to find the lowest of the numbers and average of those numbers greater than zero. Write a C++ program to help him. You need to use arrays, and switch statements for counting. Format the output neatly.

Input: -4, -5, 0, 0, 0, 0, 2, 10, -1231, 10, 99, 100, 1002, 1845, 12345

PROBLEM 2 (CASE CONVERSION)

Write a program that lets the user enter a string into a character array (size 50). It should convert the first letter of each word in the string to uppercase. If any of the letters are already uppercase, they should be left alone. Hint: Consult the ASCII chart. Notice that lowercase letters are represented by the ASCII codes 97 through 122. If you subtract 32 from any lowercase character’s ASCII code, it will yield the ASCII code of the uppercase equivalent.

<table>
<thead>
<tr>
<th>Input</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>hello</td>
<td>Hello</td>
</tr>
<tr>
<td>h</td>
<td>H</td>
</tr>
<tr>
<td>how and what To submit</td>
<td>How And What To Submit</td>
</tr>
</tbody>
</table>

PROBLEM 3 (CASE CONVERSION)

Do Problem 2, but use C++ strings rather than a character array.

HOW AND WHAT TO SUBMIT

1. Create a directory called Assign1
2. Copy your project folder for Assign1_P1, Assign1_P2, Assign1_P3 in the Assign1 directory.
3. Compress the Assign1 Directory and upload it to Canvas (under Assign1 submission).
4. Double check to make sure you have done step 1, 2, and 3 correctly.
5. Make sure each program is commented. (program level, module level, and when necessary, block or section level). Reread your documentation to make sure your documentation makes sense.