**C/C++ SENTENCE FORMATTING LAB REPORT**

**1) Enter your name, student ID, platform (Mac or PC) and date**

Name and Student ID: Samuel Indurkar 088068

Class: CIS054 C/C++ Programming

Platform (Mac or PC): eclipse and g++  
Date: 7/11/17

**DESCRIPTION:**

The project is described in the textbook end of chapter 8 PROGRAMMING PROJECTS #1.

1) Change all whitespace characters to a space

2) Remove multiple spaces

3) Capitalize the first character of the sentence

4) Make all other characters lower-case

Example:

input --> this Is A tEst.

output -> This is a test.

**LAB REPORT:  
2) Determine the Inputs, Processing and Outputs before creating the program**

|  |  |  |
| --- | --- | --- |
| **INPUTS** | **PROCESSING** | **OUTPUTS** |
| user input of a sentence | Change all whitespace characters to a space | a nice and neat sentence |
|  | Remove multiple spaces |  |
|  | Capitalize the first character of the sentence |  |
|  | Make all other characters lower-case |  |
|  |  |  |

**3) Fill in the EXPECTED & ACTUAL RESULTS**

|  |  |  |
| --- | --- | --- |
| **TEST DATA VALUES**  Provide at least two different examples strings to format | **EXPECTED RESULT**  Computed values before the program is run | **ACTUAL RESULT**  Fill in the output displayed  by the program |
| this Is A tEst. | This is a test. | This is a test. |

**DISCUSSION:**

**4) Complete the DISCUSSION section. It does not need to be long, but it needs to be complete.**4a) What did you do to develop the program? ("Followed the Directions" is not a complete description)

I had to first get the user input and then perform various modifications to it to fix errors such as capitalization and spacing.

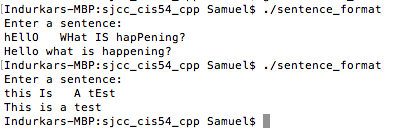
4b) What problems did you have and how did you overcome the problems?

I did not experience any problems in this project.

**PROGRAM OUTPUT:**

**5) Show screen shots for at least TWO strings that were formatted.**

Refer to previous lab assignments for instructions on how to capture a screen or portions of a screen for either the PC or a Mac



**PROGRAM LISTING:**

**6) Copy and paste the code that YOU typed to make the program work. Your program should include a comment block at the top that shows the name of the program, date, version and your name.**

/\*

\* sentence\_format.cpp

\*

\* Created on: Jul 11, 2017

\* Author: Samuel

\*/

#include <iostream>

#include <cctype>

using namespace std;

int main()

{

char sentence[200];

int i , j;

cout << "Enter a sentence:" << endl;

cin.getline(sentence, 200);

//remove whitespace characters

for (i=0; sentence[i]; i++ )

{

if (isspace(sentence[i]))

{

sentence[i] = ' ';

}

}

//remove multiple spaces

i = 0;

while (sentence[i] != '\0')

{

//looking for two consecutive spaces

if (sentence[i] == ' ' && sentence [i+1]== ' ')

{

for (j=i; sentence [j]; j++)

{

sentence[j] = sentence[j+1];

}

}

else

i++;

}

//fix capitalization

sentence[0] = toupper(sentence[0]);

for (i=1; sentence[i]; i++)

{

sentence[i] = tolower(sentence[i]);

}

cout << sentence << endl;

}