# Lab 1b

Problem: Open an existing text file, swap casing of all characters, and export to a new text file.



# Source File:

/\*Problem: Open an existing text file, swap casing of all characters, and export to a new text file.

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Inputs: Pre-existing text file

File name from the drive letter

Outputs: New text file with swapped casing from original file\*/

#include <iostream>

#include <fstream>

using namespace std;

void process(ifstream & input);

void caseSwap(char & c);

int main()

{

/\*Gets file name from user

Opens stream from the file

Calls process()\*/

cout<<"Please enter the address of the file to be processed:\n";

char file[256];

cin.getline(file,256);

ifstream input(file); //declares the input stream and opens it to the file

if(!input.is\_open())

{

cout<<"Error: The file "<<file<<" failed ot open correctly. Quitting the program!";

exit(-1);

}

process(input);

cout<<"The new file has been created with swapped casing!\n\n";

return 0;

}

void process(ifstream & input)

{

/\*Opens output stream

Sends swapped characters changed by caseSwap to output stream\*/

char c;

ofstream output("output.file");

while(input>>noskipws>>c) //this loop takes in each character from the file one by one and sends them to the caseSwap function to have their capitalization swapped

{

caseSwap(c);

output<<c;

}

}

void caseSwap(char & c)

{

/\*Swaps characters received from process to opposite casing\*/

if(c>='A'&&c<='Z')

c=c+32;

else if(c>='a'&&c<='z')

c=c-32;

else

c=c;

}

# Input File:

Yesterday's failures

Must be forgotten.

Tomorrow's new hope

And new fulfilment

Must be cherished.

# Output File:

yESTERDAY'S FAILURES

mUST BE FORGOTTEN.

tOMORROW'S NEW HOPE

aND NEW FULFILMENT

mUST BE CHERISHED.

# Sample Run:

Please enter the address of the file to be processed:

C:\Users\naroa\Documents\Visual Studio 2012\Projects\CompSci 201\Lab1\hope.txt

The new file has been created with swapped casing!

Press any key to continue . . .