CS 1580 LAB 10

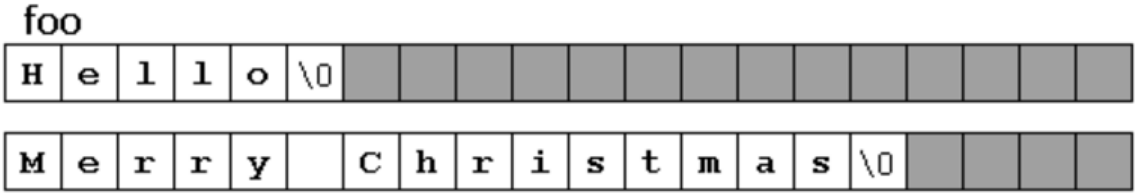
Caesar Cipher

OBJECTIVE:

The objective of this lab is to make you familiar with the concept of null terminated character arrays using the Caesar Cipher

NULL TERMINATED CHAR ARRAY

When 'foo' is a char array of size 20



ASSIGNMENT:

Write a program to take an input from the user, shift each character by 3 and print that as output. The input should be a first name followed by a last name with a white space between them. For example, if the input string is **Billy Bob**, the output should be **Eloob Ere**.

For this program, write the following functions

//Pre-Condition: …
//Post-Condition: …
//Description: …

void getInput(char name[]);

//Pre-Condition: …
//Post-Condition: …
//Description: …

void encrypt(char name[ ]);

//Pre-Condition: …
//Post-Condition: …
//Description: …

void showOutput(char name[ ]);

POINTS TO REMEMBER:

- Don't encrypt the white space between the first and last names

- The encrypt function should only print letters and not any special characters. For instance, 'z' should be encrypted as 'c' and not '}' or ']'
- ASCII characters – Upper case 65 to 90 & Lower Case 97 to 122
- Include 'cstring' to use the **strlen**(stringName)

MULTIPLE FILES

You need to create three files for this assignment.

- functionHeader.h
- functionDef.cpp
- lab10.cpp

SAMPLE OUTPUT

Please enter your first and last name: Maria Angelin John Bosco

The encrypted name is: Pduld Dqjholq Mrkq Ervfr

STEPS TO FOLLOW

- Make a new directory named Lab10 under cs1580 folder and go into that directory
- cd SDRIVE/cs1580/
  - mkdir lab10
  - cd lab10
  - create the required files
- Write and Compile your code: (fg++ *.cpp –o lab10)
- Run your program: (lab10)
- Submit the program with SAMPLE INPUT only

  Section F from 4:00 p.m. to 5:50 p.m.: (cssubmit 1580 f 10)

  Section G from 6:00 p.m. to 7:50 p.m.: (cssubmit 1580 g 10)

YOUR PROGRAM WILL BE GRADED BASED ON:

- Use of meaningful variable names/ indentations/ commenting / Header Comments
- Use of functions and write pre, post, and description for each prototype.
- Use of multiple files
- Use return even in void functions.
- Readability and Correctness of the program
- Following lab instructions