Pittsburg State University
Programming Assignments
EET 247 – Programming for Electronic Devices

PROBLEM SET 4: INTRODUCTION TO COMPUTER PROGRAMMING

LAB ASSIGNMENT – 4A Manipulating Strings

Overview:

The purpose of this exercise is to challenge your knowledge of strings & arrays in order to decrypt 3 strings/messages.
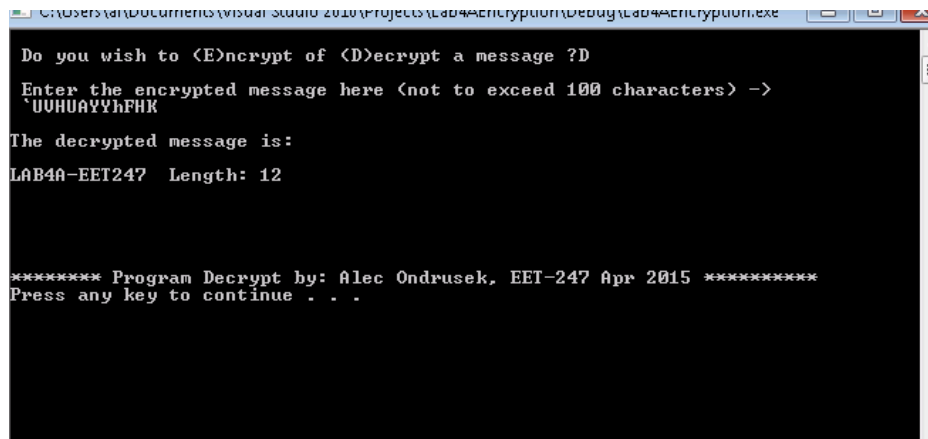
Objective:

Using your textbook, notes and personal research material, write a program using the C Programming language that will allow a user to input a string of unrelated characters and it decrypt the string to render a readable display per the specifications provided. **NOTE:** Your source code should be well documented as outlined in Handout #2

Specifications:

1. User Input:

   a. Prompt the user to input a string. The maximum string length is **100**.

   b. Decrypt the string by decreasing the ASCII code of the individual elements by 20.

   c. Feel free to use any type of looping structure to allow multiple attempts at an input and accomplish the task.

2. Output: (see example)

   a. Any necessary cosmetic displays that aid in the input/output are acceptable.

   b. You must display the inputted string, the decrypted string and it's length.

   c. Your name, course number and current month & year must be displayed.

   d. Utilize any system commands, such as pause or cls as necessary.

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e. Sample Output:

Instructions

1. Develop and test the program such that it:

    a. Generates the desired output screens based on the following encrypted strings:

    b. **`UVHUAYYhFHK**   is LAB4A-EET247 (test item)

    c. **6U4k]gY4aUb4`YUfbg4Zfca4ch\Yf;g4a]ghU_Y6**

    d. **6h\Y4ei]W_4Vfckb4Zcl4^iadg4cjYf4h\Y4`Unm4Xc[4Ubh4`YUgh4ED4h]aYg4U4U4XUm6**

    e. **U4dYbbm4gUjYX4]g4U4dYbbm4YUfbYX**

REPORTING: Include your executable file, documented source code and screen shots of the decrypted strings and submit in a ZIP file for proper consideration.

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