

**Assembly Language (A, B, C)**

**Fall 2017**

**Assignment-3**

**Submission: Wednesday 1<sup>st</sup> November**

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**(On String Instructions and Video Memory)**

**Question 1:**

Write a subroutine Trimmer that trims all the occurrences of string2 from string1 printed on video screen. The subroutine takes the following parameters (in same order):

- i. Row number where string 1 is printed on screen
- ii. Column number where string 1 is printed on screen
- iii. Length of string 1
- iv. Offset (i.e. address) of string 2 in data segment

You can safely assume that String2 length is less than String1 length. You would have to calculate the length of string 2 yourself. For example:

String 1 (on video screen): Hello world

String 2 (defined in ds): wor

After this subroutine string1 becomes:

Hello ldrld

(You can create other subroutines as well.)

**Question 2:**

Write a near procedure to copy a given area on the screen at the center of the screen without using a temporary array. The routine will be passed top, left, bottom, and right in that order through the stack. The parameters passed will always be within range the height will be odd and the width will be even so that it can be exactly centered.

**Question 3:**

Update the strcmp subroutine of book, such that it returns 0 if two strings are equal, -1 if string 1 is smaller than string 2 and 1 if string 1 is greater than string 2. (Strings are defined in data segment.)