

CS221 Assembly Language

Lab7

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1- Practice:

Practice the AND and OR to change a given string to uppercase and lowercase.

2- Exercise:

You will write a program that has three procedures besides the main procedure. This latter (main) is looping forever asking the user to:

1: enter a string

2: then you will check if this string is a Palindrome by two ways:

Way 1: comparing the first and the last letters, if they are not equal then it is not a palindrome otherwise keep going with the next letters until you are in the middle of the string. In this case, it is a palindrome. This way should be applied using two different address modes in different procedures:

procedure 1: using base addressing mode

procedure 2: using index addressing mode

Way 2: by reversing the string in another empty location (you should write a procedure called reversestring which reverses the string:

example: reversestring('ABC') = 'CBA'

then the entered string is a palindrome if the reversestring of the string is equal to the string itself. This means that you should add the procedure you did in a previous lab to check if the two strings are equal.

NOTE: a string is a palindrome if it reads the same backwards as forwards, e.g. madam

Note: You should practice and do the exercise at home and, in the Lab time: the first half the instructor will check your homework, take notes, and answer your questions

if you have any. The second half will be a quiz.

3- Quiz:

You may have Quiz this week.