

Assignment 0: Getting acquainted with assembly language and the linking process.

Submissions which deviate from the instructions will not be graded!

Please make your output exactly as in the examples below.

Otherwise automatic scripts would fail on your assignment and you will lose your points for this.

Assignment Description

We provide you with a simple program written in C that reads an input line from a user into a null-terminated string. Then, this program calls a function written in assembly language (which you need to implement) that receives a (pointer to) a null terminated character string as an argument. Your code should operate on the string as follows:

- Convert whitespace characters TAB and SPACE (' ', '\t') to '_' character
- Count (and return) the number of converted characters.

Assume that maximal string size is 100, including newline and NULL termination characters.

Note: the rest of the characters in the input string should remain as they were.

The function returns the counter value.

The characters conversion should be **in-place**, which means we should change the original input string to get the result string.

Examples:

```
> Assignment0.out
42: aB cDefg!
42: _aB_cDefg!
2
```

```
> Assignment0.out
a b c d e f
a__b_c_d_e_f
6
```

Hint: we have done almost all the work for you, as this is just a simple "getting familiar" assignment. If you find yourself adding more than 10 lines of code, then you are probably doing something wrong! (Shortest current solution: 6 instructions added!)

What We Provide

The attached files:

- [mainAssignment0.c](#) as explained above.
- [asmAssignment0.s](#) contains skeleton code that you need to modify.

Submission Instructions

You have to submit a single zip file, **ID1_ID2.zip** , which includes **asmAssignment0.s file only**.

Do not add directory structure to the zip file!

Make sure you follow the coding and submission instructions correctly (print exactly as requested).

[Submission System](#)

Good Luck!