

**is this line correct? length = . message**

Short answer: No, not as written. The common GNU assembler idiom is “length = . - message”, with a minus sign between the current location “.” and the label, not a bare dot followed by the label.

Explanation

* “.” is the current location counter; it evaluates to the assembler’s current address within the section.
* “message” is the label at the start of the string.
* “. - message” computes the difference between the current location and the start label, yielding the byte length of the data emitted between those two points (i.e., the string’s size, including the newline if present).
* So the correct directive should be written on one line as:  
  length = . - message
* If the assembler requires explicit expression syntax, ensure there is a minus operator and spacing isn’t mistaken for tokens; “. message” without “-” is a syntax/error in most assemblers because it doesn’t form a valid expression.

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1. <https://stackoverflow.com/questions/72251342/loop-to-count-length-of-string-assembly-arm>

1. <https://developer.arm.com/documentation/dui0472/latest/C-and-C---Implementation-Details/Basic-data-types-in-ARM-C-and-C-->

1. <https://developer.arm.com/documentation/101754/latest/armclang-Reference/armclang-Integrated-Assembler/Section-directives>

1. <https://armasm.com/docs/working-in-linux/add-the-inputs/>

1. <https://hackmd.io/@CEAssembly/rkWgEVQcF>

1. <https://keleshev.com/compiling-to-assembly-from-scratch/07-arm-assembly-programming>

1. <https://mcuoneclipse.com/2013/04/14/text-data-and-bss-code-and-data-size-explained/>

1. <https://azeria-labs.com/arm-data-types-and-registers-part-2/>

1. <http://www.cs.emory.edu/~cheung/Courses/255/Syllabus/7-ARM/data-section.html>