

# LAB 18

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**Due** Oct 19 by 11:59pm    **Points** 5    **Submitting** a file upload    **Available** until Oct 19 at 11:59pm

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This assignment was locked Oct 19 at 11:59pm.

In this lab, you are to create an external file called `String_Length()` with the following contract:

- [String\\_Length](#)

- @ Subroutine `String_Length` accepts the address of a string and counts the characters in the string, excluding the NULL character and returns that value as an int (word) in the R0 register. It will read a string of characters terminated by a null.
  - @ `R0`: Points to first byte of string to count
  - @ `LR`: Contains the return address  
  - @ Returned register contents:
    - @ `R0`: Number of characters in the string (does not include null).
    - @ All registers are preserved as per AAPCS

Next you are to create driver program that calls your `String_Length()` function and outputs the length of the string passed to it using `putstring()`.

Upload both the program and a screenshot showing the output. Run your code with the string "Cat in the hat". Create some string variable to test.

