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ECE1110 Homework #2

1. Number of microcode cycles: 3
2. Number of microcode cycles: 8

Finding the end of string by having the termination be ‘\0’ is much easier than providing the number of bits in the string at the beginning and then terminating after that many. If you are provided with the string length, then you have to implement a counting sequence to ensure you are ending early or going too far. This would include storing the bit length of the string, a counter that begins at 0 and increments every time you increment the bit address, and checking the counter each round to ensure the string is not at the end. As a microcode writer, I feel that this would be more complex, time-consuming, and difficult than just comparing the current value with ‘\0’ to check for the end of a string.