

ID:  
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# FINAL

## STRING COMPARE

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### 1. QUESTION

Write assembly code for following algorithm.

- Compare two strings.
- Your algorithm starts comparing first character of each string.
- If they are equal, it continues to compare with next character of each string until they are different or one of them is null character (which is zero).
- If both strings are equal, write **zero** into \$0120.
- If string1 is greater than string2, write **one** into \$0120.
- If string2 is greater than string1, write **two** into \$0120.
- string1 starts from \$0100.
- string2 starts from \$0110.

Example:

- "micro" is greater than "macro" because "macro" is alphabetically before than "micro".
- "orange" is greater than "apple" because "apple" is alphabetically before than "orange".

**String initialization directive in assembly code:**

```
                .org $0100
string1         .str "apple"
                .org $0110
string2         .str "orange"
```