# TOKENIZING TEXT WITHOUT WHITESPACE

相撲の世界は大変厳しいものである。



相撲の世界は大変厳しいものである。

➤ Using a dictionary, find the longest string of characters that appear in the dictionary.

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相撲

- ➤ Using a dictionary, find the longest string of characters that appear in the dictionary.
- > Save that string, and repeat on the remainder of the sentence.

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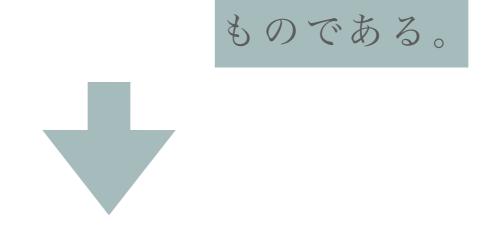
相撲の世界は大変

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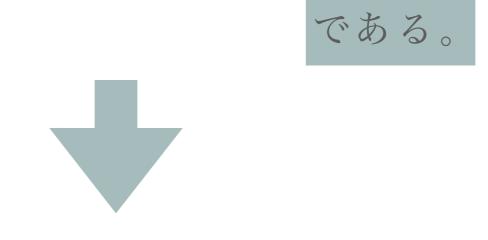
相撲 の 世界 は 大変 厳しい

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相撲 の 世界 は 大変 厳しい もの で ある

- ➤ Using a dictionary, find the longest string of characters that appear in the dictionary.
- > Save that string, and repeat on the remainder of the sentence.
- ➤ If a word is not encountered in the dictionary, save a single character and repeat on the remainder of the sentence.
- ➤ (This algorithm doesn't handle unknown words well)

相撲の世界は大変厳しいものである。

➤ This approach works decently well for Chinese and Japanese, but not well at all for English.

THETABLEDOWNTHERE



**THETA** 

➤ This approach works decently well for Chinese and Japanese, but not well at all for English.

BLEDOWNTHERE



**THETA** 

**BLED** 

➤ This approach works decently well for Chinese and Japanese, but not well at all for English.

OWNTHERE



THETA BLED OWN

➤ This approach works decently well for Chinese and Japanese, but not well at all for English.

THERE



THETA BLED OWN THERE

# TOKENIZING TEXT WITHOUT WHITESPACE

➤ Another approach is to treat this as a classification task.

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BESBESBEBIEBESBE

- ➤ Each character is tagged with one of 4 tags:
  - ➤ B beginning of the word
  - > E end of the word
  - ➤ I inside the word
  - > S standalone word