

word_boundaries_solution

March 18, 2023

1 TODO: Find All 3-Letter Words

In the cell below, write a regular expression that can match all 3-letter words in the `sample_text` string. As usual, save the regular expression object in a variable called `regex`. Then use the `.finditer()` method to search the `sample_text` string for the given regular expression. Finally, write a loop to print all the matches found by the `.finditer()` method.

```
In [1]: # Import re module
import re

# Sample text
sample_text = 'John went to the store in his car, but forgot to buy bread.'

# Create a regular expression object with the regular expression
regex = re.compile(r'\b\w\w\w\b')

# Search the sample_text for the regular expression
matches = regex.finditer(sample_text)

# Print all the matches
for match in matches:
    print(match)
```

```
<_sre.SRE_Match object; span=(13, 16), match='the'>
<_sre.SRE_Match object; span=(26, 29), match='his'>
<_sre.SRE_Match object; span=(30, 33), match='car'>
<_sre.SRE_Match object; span=(35, 38), match='but'>
<_sre.SRE_Match object; span=(49, 52), match='buy'>
```

2 TODO: Finding Last Digits

In the cell below, our `sample_text` string contains some numbers separated by whitespace characters.

Write code that uses a regular expression to count how many numbers (greater than 3), have 3 as their last digit. For example, 93 is greater than 3 and its last digit is 3, so your code should count this number as a match. However, the number 3 by itself should not be counted as a match.

As usual, save the regular expression object in a variable called `regex`. Then use the `.finditer()` method to search the `sample_text` string for the given regular expression. Then, write a loop to print all the matches found by the `.finditer()` method. Finally, print the total number of matches.

```
In [2]: # Import re module
import re

# Sample text
sample_text = '203 3 403 687 283 234 983 345 23 3 74 978'

# Create a regular expression object with the regular expression
regex = re.compile(r'\B3\b')

# Search the sample_text for the regular expression
matches = regex.finditer(sample_text)

# Set counter
num_matches = 0

# Print all the matches
for match in matches:
    print(match)
    num_matches += 1

# Print the total number of matches
print('\nTotal Number of Matches:', num_matches)

<_sre.SRE_Match object; span=(2, 3), match='3'>
<_sre.SRE_Match object; span=(8, 9), match='3'>
<_sre.SRE_Match object; span=(16, 17), match='3'>
<_sre.SRE_Match object; span=(24, 25), match='3'>
<_sre.SRE_Match object; span=(31, 32), match='3'>
```

Total Number of Matches: 5

If you wrote your code correctly you should get a total of 5 matches.

```
In [ ]:
```