character_sets_solution

March 18, 2023

1 TODO: Find Phone Numbers With Country Codes

In the cell below, our `sample_text` consists of a multi-line string that mimics a phone book:

```
Mr. Brown: +1-555-123-4567
Mrs. Smith: +61 455 555 4549
Mr. Jackson: +375-655-777-7346
Ms. Wilson: +213(555)999-8464
```

Notice that each phone number has a country calling code. The country calling codes are preceded by the + sign and can have anywhere from 1 to 3 numbers. Write a regular expression that can find all these phone numbers. This includes the + sign, the country calling code (regardless of the number of digits), and the phone number. 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.

HINT : You can use the qualifier {m,n} in your regular expression. This qualifier means there must be at least `m` repetitions, and at most `n` repetitions of the previous regular expression. For example, a/{1,3}b will match a/b, a//b, and a///b. It won't match ab, which has no slashes, or a////b, which has four slashes.

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

         # Sample text
         sample_text = '''
         Mr. Brown: +1-555-123-4567
         Mrs. Smith: +61 455 555 4549
         Mr. Jackson: +375-655-777-7346
         Ms. Wilson: +213(555)999-8464
         '''

         # Create a regular expression object with a regular expression
         regex = re.compile(r'\+\d{1,3}.\d{3}.\d{3}.\d{4}')

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

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

```
<_sre.SRE_Match object; span=(12, 27), match='+1-555-123-4567'>
<_sre.SRE_Match object; span=(40, 56), match='+61 455 555 4549'>
<_sre.SRE_Match object; span=(70, 87), match='+375-655-777-7346'>
<_sre.SRE_Match object; span=(100, 117), match='+213(555)999-8464'>
```

In [ ]: