1.4-for-loops-solutions

April 19, 2021

0.1   # For Loops

EXERCISES   *1. Make a list with memebers state of the Association of Southest Asian Nations.*

for instance:

`ASEAN_countries = ["", "", "", ""]`

SOLUTION

2. Print each element (country) of your list within the ASEAN memebers states

```
[1]: # Sol 1
     ASEAN_countries = [
             "Brunei Darussalam",
             "Cambodia",
             "Indonesia",
             "Lao PDR",
             "Malaysia",
             "Myanmar",
             "Philippines",
             "Singapore",
             "Thailand",
             "Viet Nam"
     ]

     # Sol 2
     for country in ASEAN_countries:
         print(country)
```

```
Brunei Darussalam
Cambodia
Indonesia
Lao PDR
Malaysia
Myanmar
Philippines
Singapore
Thailand
Viet Nam
```

3. What the following for loop does?

```python
my_numbers = list(range(0,20))

for number in my_numbers:
    if number == 5:
        print("Hey, I love 5!")
    else:
        print(number)
```

SOLUTION

```python
[2]: my_numbers = list(range(0,20))

for number in my_numbers:
    if number == 5:
        print("Hey, I love 5!")
    else:
        print(number)
```

```
0
1
2
3
4
Hey, I love 5!
6
7
8
9
10
11
12
13
14
15
16
17
18
19
```

This for loop function iterates for each number in the list my_numbers (which is a list with 20 elements, values from 0 to 19). There is also a if function that prints a string everytime the value 5 is on the loop. Anything else, the function just print the value

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4. Read the code below and try to identify what the errors are without running it. Run the code, and read the error message. What type of error is it? Fix the error.

```python
brics = ['Brazil', 'Russia', 'China', 'South Africa']
print('My favorite season is ', brics[4])
```

SOLUTION

```
[3]: brics = ['Brazil', 'Russia', 'China', 'South Africa']
     print('the least populated country within BRICS is ', brics[4])
```

```
---------------------------------------------------------------------------
IndexError                                Traceback (most recent call last)
<ipython-input-3-3daa96a56b43> in <module>()
      1 brics = ['Brazil', 'Russia', 'China', 'South Africa']
----> 2 print('My favorite season is ', brics[4])

IndexError: list index out of range
```

Python reports an IndexError if we attempt to access a value that doesn't exist. This is a kind of runtime error. Cannot be detected as the code is parsed because the index might be calculated based on data.