Day 15 - [Scripting] There's a Python in my stocking!

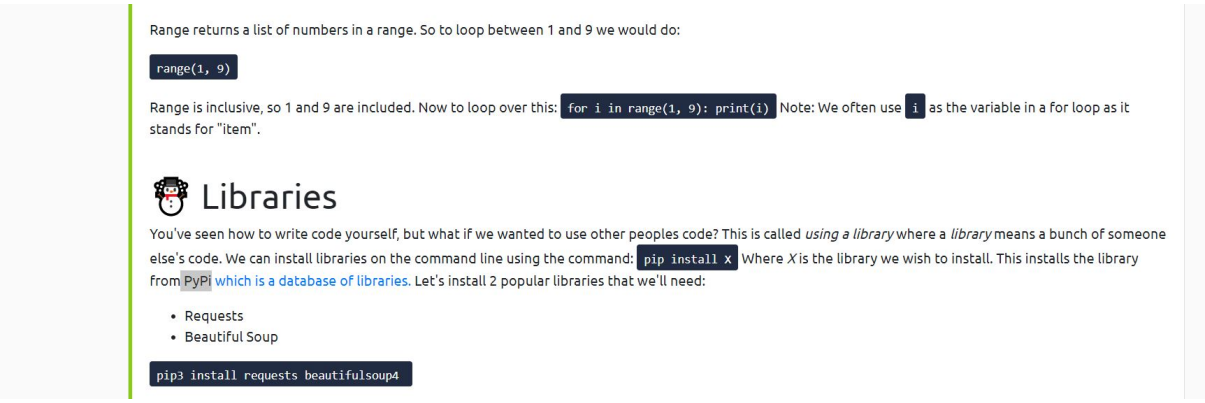
Tool Used: python, VS code

Solution/walkthrough:

Q1

True =1, thus ‘true + true’ means 1 +1, which =2.

Q2



Range returns a list of numbers in a range. So to loop between 1 and 9 we would do:

```
range(1, 9)
```

Range is inclusive, so 1 and 9 are included. Now to loop over this: `for i in range(1, 9): print(i)` Note: We often use `i` as the variable in a for loop as it stands for "item".

Libraries

You've seen how to write code yourself, but what if we wanted to use other peoples code? This is called *using a library* where a *library* means a bunch of someone else's code. We can install libraries on the command line using the command: `pip install x` Where *X* is the library we wish to install. This installs the library from PyPi which is a database of libraries. Let's install 2 popular libraries that we'll need:

- Requests
- Beautiful Soup

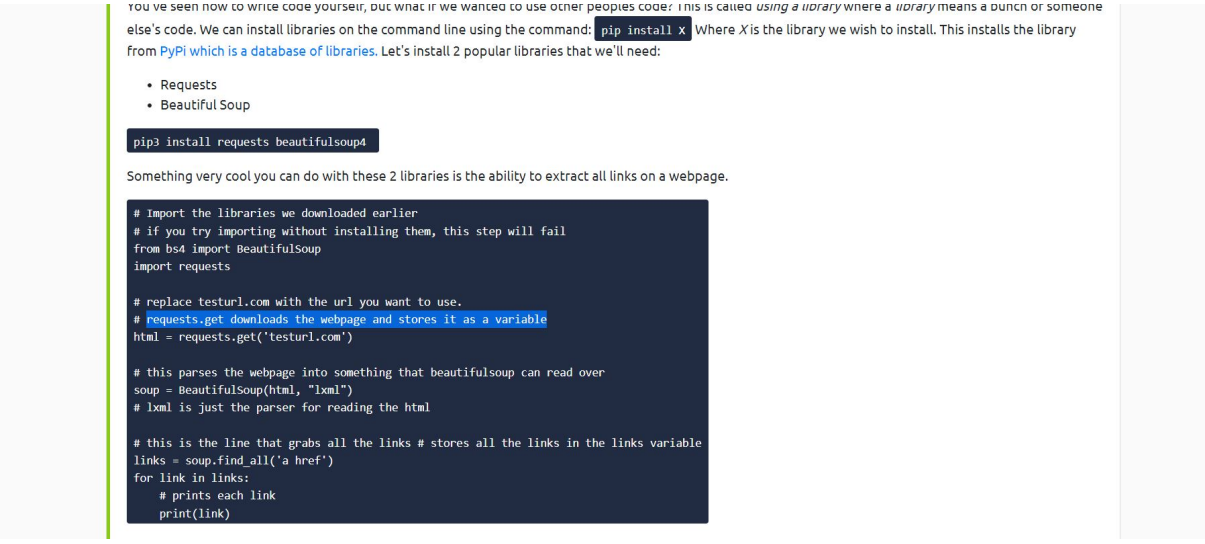
```
pip3 install requests beautifulsoup4
```

Study from Try hack Me.

Q3

In the bool() function, “false” is a string, which means it contains value, thus it should return true.

Q4



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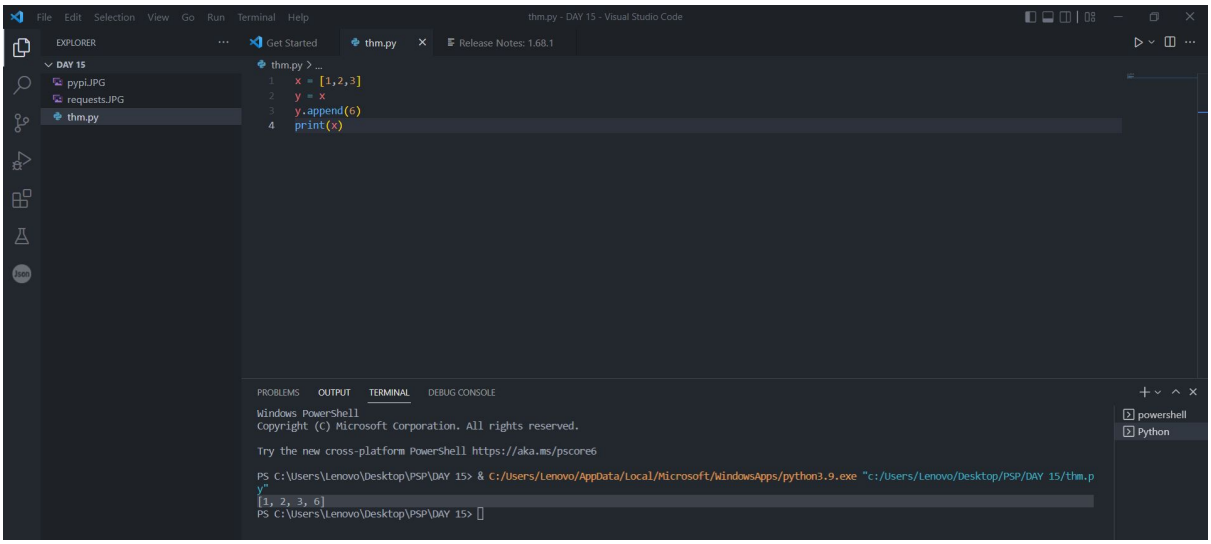
Something very cool you can do with these 2 libraries is the ability to extract all links on a webpage.

```
# Import the libraries we downloaded earlier
# if you try importing without installing them, this step will fail
from bs4 import BeautifulSoup
import requests

# replace testurl.com with the url you want to use.
# requests.get downloads the webpage and stores it as a variable
html = requests.get('testurl.com')

# this parses the webpage into something that beautifulsoup can read over
soup = BeautifulSoup(html, "lxml")
# lxml is just the parser for reading the html

# this is the line that grabs all the links # stores all the links in the links variable
links = soup.find_all('a href')
for link in links:
    # prints each link
    print(link)
```

Study from Try Hack Me.

Q5



Follow the code and get the output.

Q6

Because y is a reference to x. When y is changing, the x is changing also.

Q7

Because Skidy is identical in the list of ‘names’.

Q8

Because ‘elf’ is not in the list of ‘names’, in the list is ‘Elf’.