Lab 141: Script Python

🔗 Link: https://awsrestart.instructure.com/courses/1632/modules/items/886859

📁 Repo: https://github.com/francopig/aws-python/tree/main/18. Script

Using SSH to Connect to the Linux Host

Windows Users: Using SSH to Connect

These instructions are specifically for Windows users. If you are using macOS or Linux, skip to the next section.

1. Click the Details drop down menu above the instructions you are currently reading, and then click Show. A Credentials window will be presented.
2. Click the **Download PPK** button and save the **labsuser.ppk** file.
   Typically your browser will save it to the Downloads directory.
3. Exit the Details panel by clicking the **X**.
4. Download **PuTTY** to SSH into the Amazon EC2 instance. If you do not have PuTTY installed on your computer, download it here.
5. Open **putty.exe**
6. Configure PuTTY timeout to keep the PuTTY session open for a longer period of time:
   - Click **Connection**.
   - Set **Seconds between keepalives** to `30`.
7. Configure your PuTTY session:
   - Click **Session**.
   - **Host Name (or IP address):** Paste the **IP address of the Linux Host instance** you saved in the file earlier.
     Lab Details
   - Back in PuTTY, in the **Connection** list, expand **SSH**
   - Click **Auth** *(don't expand it)*.
   - Click **Browse**.
   - Browse to and select the **labsuser.ppk** file that you downloaded.
   - Click **Open** to select it.
   - Click **Open** again.
8. Click **Yes**, to trust and connect to the host.
9. When prompted **login as**, enter: `ec2-user`.
   This will connect you to the EC2 instance.

Your Challenge

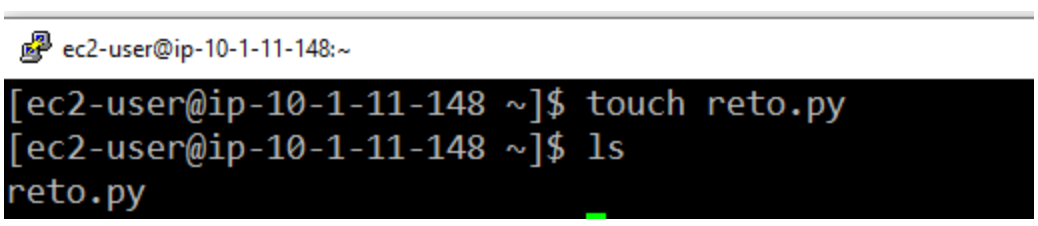
- Write a **Python script** to:
  - Display all the **prime numbers between 1 to 250**.
  - Store the results in a **results.txt** file.
- Test the script. Verify that it produced the expected results in the **results.txt** file.
- **Save the script** and **make a note of its location (absolute path)** for future reference.

Note: Both Python 2 and Python 3 are installed on the Linux Host. It is recommended to use Python 3. To run a Python script using version 3, run the following command by replacing *file.py* with your file name.

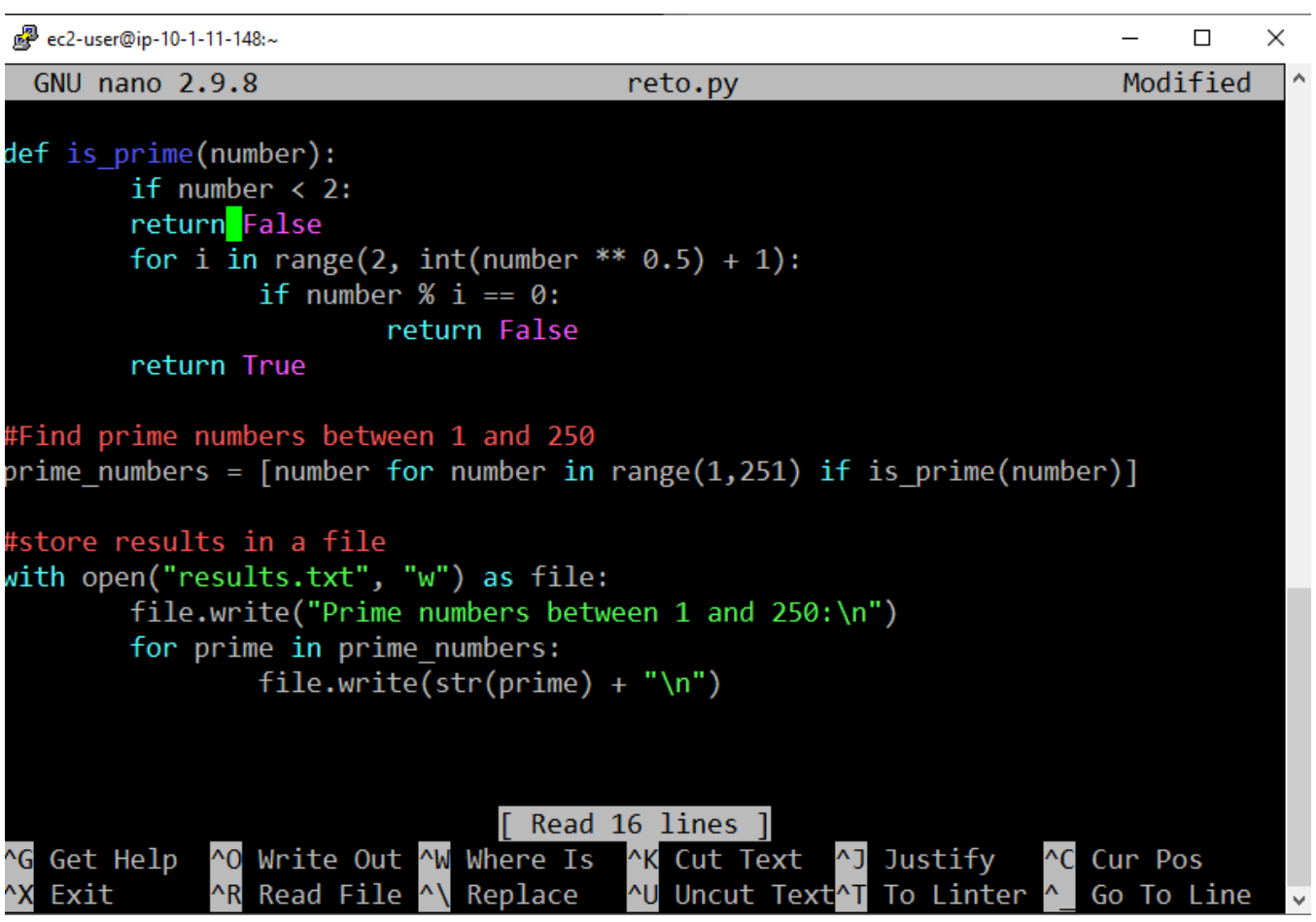
```
python3 file.py
```

Solución

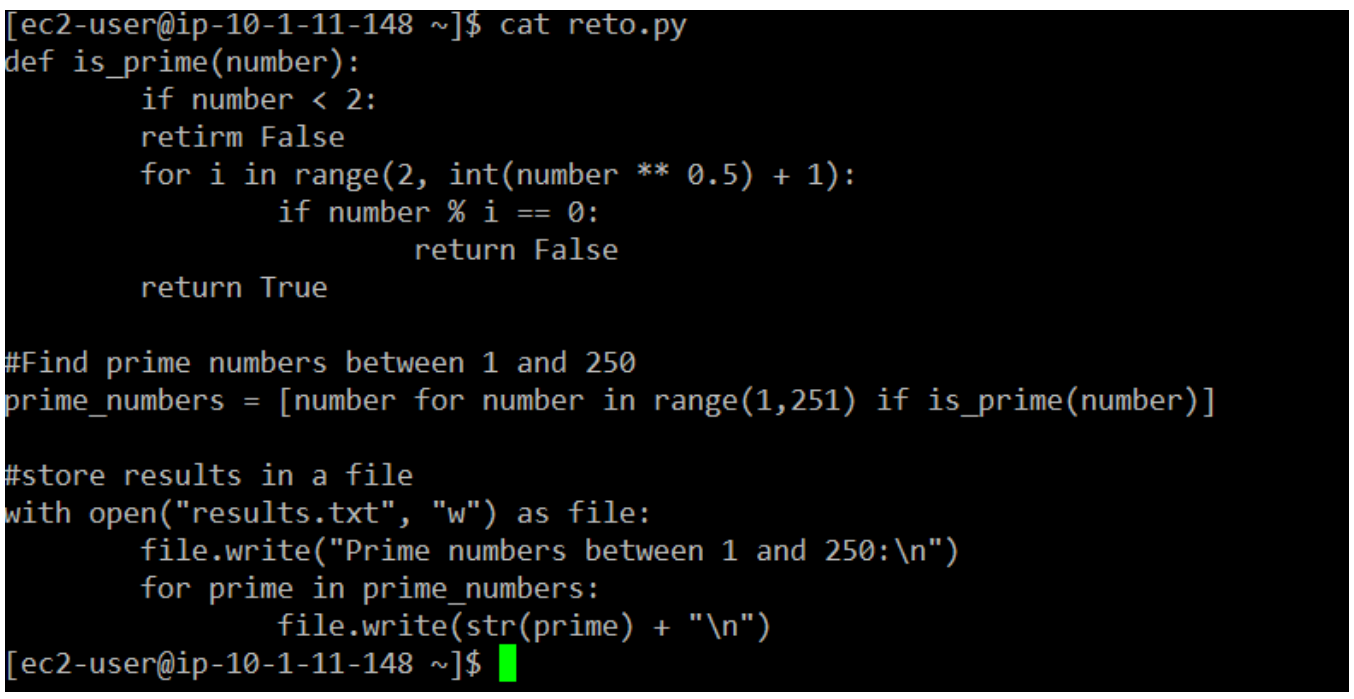
1. Creo el archivo.py



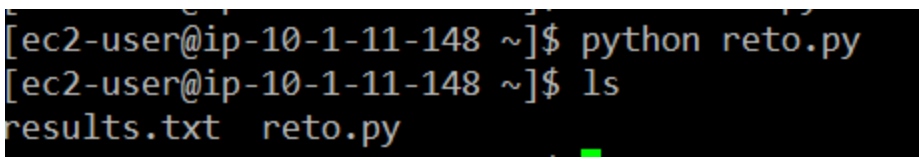
2. Código hecho en vim



3. Compruebo el código se haya guardado



4. Ejecuto el programa y veo que se haya creado el archivo 😜



5. Vemos los valores almacenados dentro de results.txt

```
[ec2-user@ip-10-1-11-148 ~]$ cat results.txt
Prime numbers between 1 and 250:
2
3
5
7
11
13
17
19
23
29
31
37
41
43
```

🎯 Path del programa: /home/ec2-user/reto.py

Código:

```
def is_prime(number):
    if number < 2:
        return False
    for i in range(2, int(number ** 0.5) + 1):
        if number % i == 0:
            return False
    return True

# Find prime numbers between 1 and 250
prime_numbers = [number for number in range(1, 251) if is_prime(number)]

# Store results in a file
with open("results.txt", "w") as file:
    file.write("Prime numbers between 1 and 250:\n")
    for prime in prime_numbers:
        file.write(str(prime) + "\n")
```