Write-up: Beginner picoMINI 2022 - Codebook

This is my first foray into a Jeopardy-style CTF, and my first CTF. I started on the beginner track, since I am still relatively new to this entire thing. As the Red King once said, "Begin at the beginning, and go till you come the end: then stop" While I agree with the sentiment, I doubt there will be an end to the rabbit hole of CTFs for me now that I've started to fall.

ANYWAY

Codebook presents you with this challenge:

Run the Python Script code.py in the same directory as codebook.txt.

Sounds straightforward. Thankfully it is.

Capture

I start by creating a few new directories within my Documents folder using the mkdir command and navigate to the Codebook directory using cd Codebook.

```
┌──(kali㉿kali)-[~/Documents/picoCTF/General_Skills/Codebook]
```

Next, I use wget to download code.py from picoCTF.net

```
┌──(kali㉿kali)-[~/Documents/picoCTF/General_Skills/Codebook]
└─$ sudo wget https://artifacts.picoctf.net/c/102/code.py
--2022-05-17 07:33:55--  https://artifacts.picoctf.net/c/102/code.py
Resolving artifacts.picoctf.net (artifacts.picoctf.net)... 13.249.94.38, 13.249.94.127, 13.249.94.103, ...
Connecting to artifacts.picoctf.net (artifacts.picoctf.net)|13.249.94.38|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 1278 (1.2K) [application/octet-stream]
Saving to: 'code.py'

code.py                    100%[=========================>]   1.25K  --.-KB/s    in 0s

2022-05-17 07:33:55 (39.4 MB/s) - 'code.py' saved [1278/1278]
```

I then use the same method to get codebook.txt as well.

```
┌──(kali㉿kali)-[~/Documents/picoCTF/General_Skills/Codebook]
└─$ sudo wget https://artifacts.picoctf.net/c/102/codebook.txt
--2022-05-17 07:35:00--  https://artifacts.picoctf.net/c/102/codebook.txt
Resolving artifacts.picoctf.net (artifacts.picoctf.net)... 13.249.94.127, 13.249.94.103, 13.249.94.38, ...
Connecting to artifacts.picoctf.net (artifacts.picoctf.net)|13.249.94.127|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 27 [application/octet-stream]
Saving to: 'codebook.txt'

codebook.txt                100%[=====================================>]      27  --.-KB/s    in 0s

2022-05-17 07:35:00 (52.7 MB/s) - 'codebook.txt' saved [27/27]
```

Then using the `ls` command I verify that both files live in the Codebook directory.

```
┌──(kali㉿kali)-[~/Documents/picoCTF/General_Skills/Codebook]
└─$ ls
codebook.txt  code.py
```

They do. This is the first time I have spun up this Kali VM so I wanted to verify that Python exists on the machine.

```
┌──(kali㉿kali)-[~/Documents/picoCTF/General_Skills/Codebook]
└─$ python
Python 3.9.10 (main, Jan 16 2022, 17:12:18)
[GCC 11.2.0] on linux
Type "help", "copyright", "credits" or "license" for more information.
```

It is.

Now to complete the mission objective.

```
┌──(kali㉿kali)-[~/Documents/picoCTF/General_Skills/Codebook]
└─$ python code.py
picoCTF{c0d3b00k_455157_197a982c}
```

Mission complete: flag captured.

Conclusion

This was a fun introduction into CTFs and I plan on completing as many of these as I can and documenting them. Thanks for reading.