# **Programming-CYS**

#### **Documentation:**

The purpose of this documentation is to provide a clear understanding of the flow and steps involved in the given task. According to the task, we are required to write a program to perform a brute force attack on a specific URL. The implementation is divided into four separate files:

- 1. brute\_force.py
- 2. scrape\_data.py
- 3. extract\_ips.py
- 4. confirm\_dns.py

Each file handles a specific part of the task, and the code is well-documented for better comprehension. Upon completion, the program generates the following output files:

- 1. logs.txt
- 2. ips.txt
- 3. confirmed\_dns.txt

## **Key Notes:**

- In **brute\_force.py**, 10,000 combinations are defined for the brute force attack.
- The program may take some time to complete the attack depending on the computational resources.

#### Order of Execution:

The following steps outline the correct order to execute the files and describe their respective purposes:

# 1. Run brute\_force.py:

- a. Performs the brute force attack to find the password.
- b. Once the password is identified, note it down for subsequent steps.

Command: python brute\_force.py

# Run scrape\_data.py:

- Logs into the website using the identified password.
- Scrapes data from the website.
- Generates the output file logs.txt.

Command: python scrape\_data.py

# Run extract\_ips.py:

- Reads the logs.txt file and extracts IP addresses.
- Generates the output file ips.txt.

Command: python extract\_ips.py

# Run confirm\_dns.py:

- Reads the ips.txt file.
- Checks port 53, performs reverse DNS lookups, and validates DNS servers.
- Generates the output file confirmed\_dns.txt.

Command: python confirm\_dns.py