

Old Dominion University

CYSE 270 Linux System for Cybersecurity

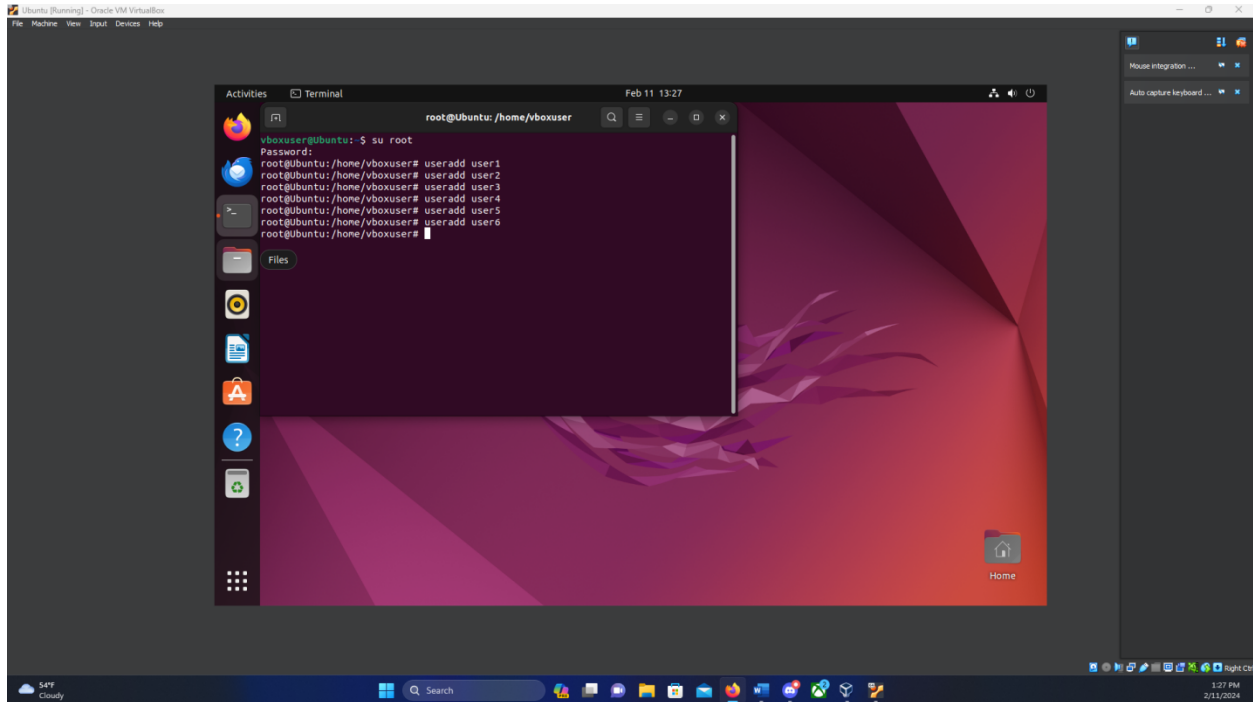
Assignment #5

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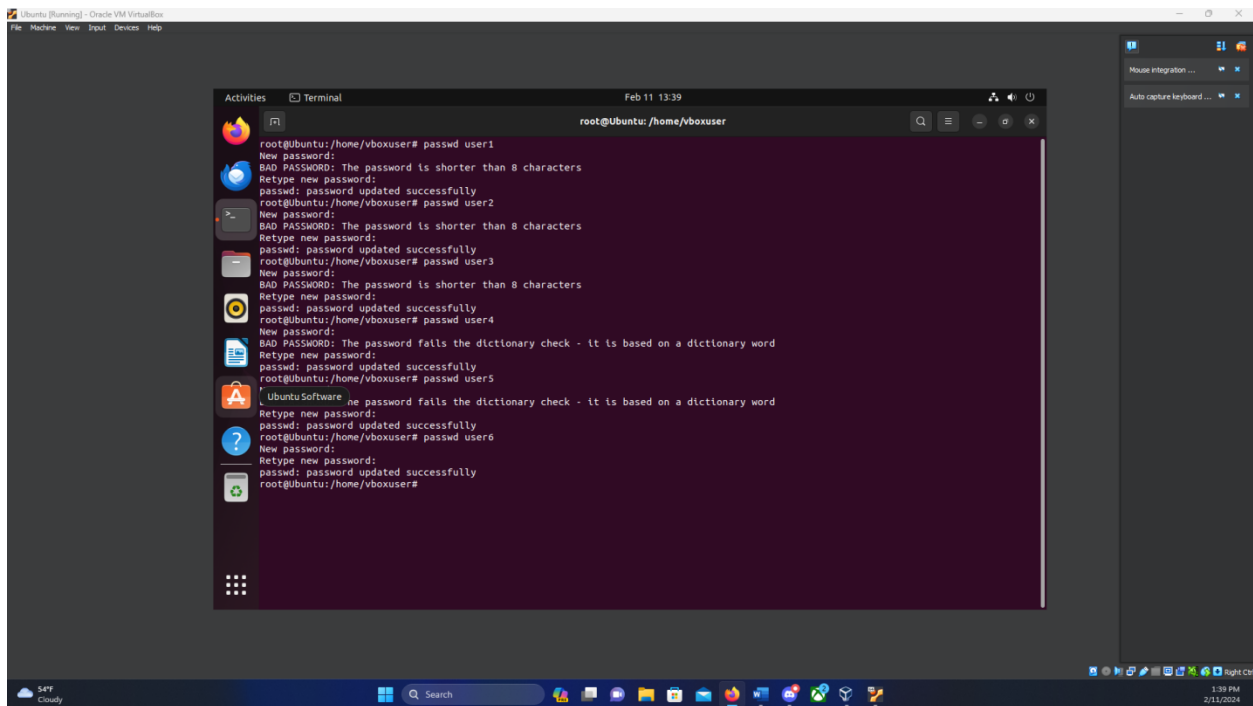
## Task A

1. Create 6 users in your Linux Terminal, then set the password for each user that meets the following requirements respectively. You should list the passwords created for each user.



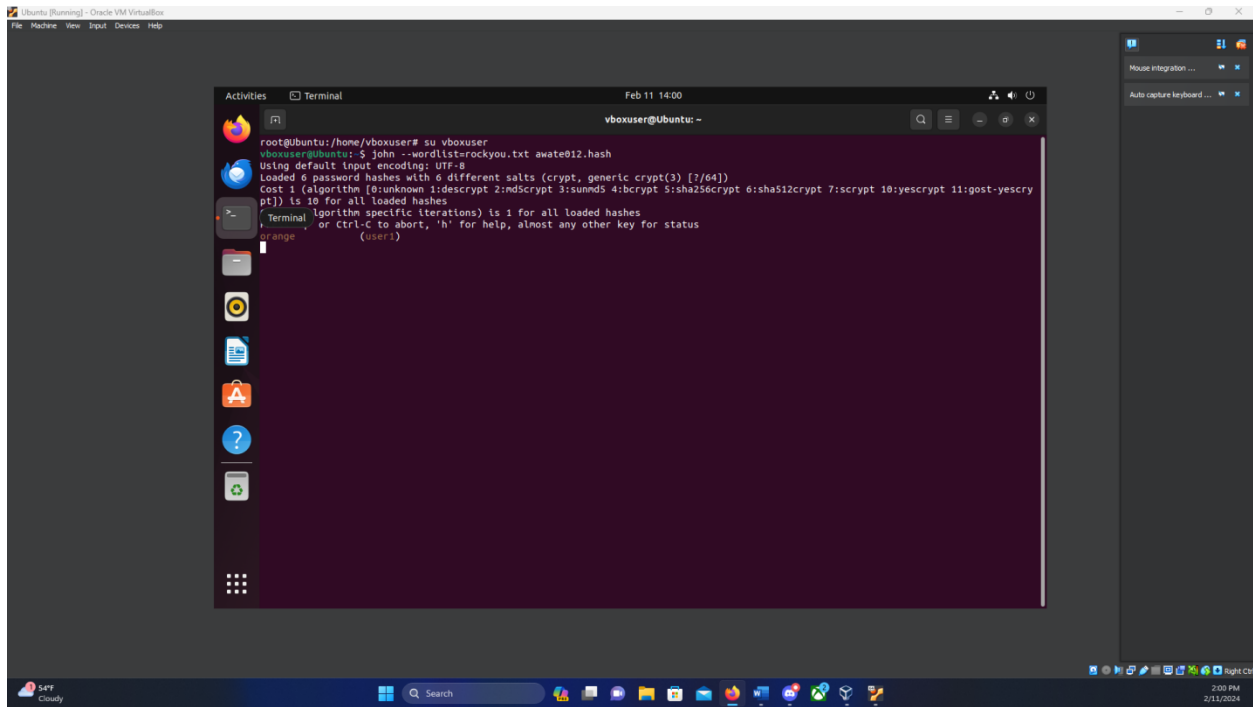
- a. For user1, the password should be a simple dictionary word (all lowercase)
  - i. User1's set password is **orange**.
- b. For user2, the password should consist of 4-character digits
  - i. User2's set password is **1234**.
- c. For user3, the password should consist of a simple dictionary word of any length (all lowercase) + digits
  - i. User3's set password is **hotdog1**.
- d. For user4, the password should consist of a simple dictionary word (all lowercase) + digits + symbols
  - i. User4's set password is **building1!**.

- e. For user5, the password should consist of a simple dictionary word (all lowercase) + digits
  - i. User5's set password is **controller23**.
- f. For user6, the password should consist of a simple dictionary word (with a combination of lower and upper case) + digits + symbols
  - i. User6's set password is **Keyboard567!@**.

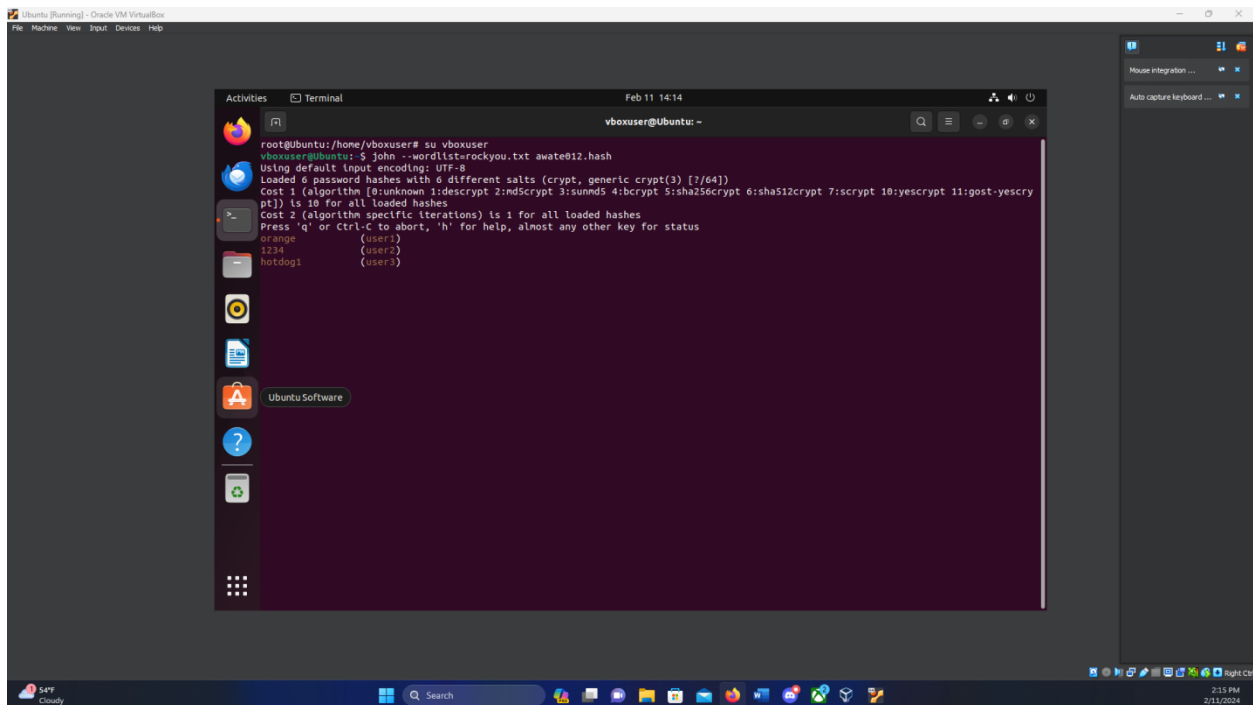


```
root@ubuntu:/home/vboxuser# passwd user1
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: password updated successfully
root@ubuntu:/home/vboxuser# passwd user2
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: password updated successfully
root@ubuntu:/home/vboxuser# passwd user3
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: password updated successfully
root@ubuntu:/home/vboxuser# passwd user4
New password:
BAD PASSWORD: The password falls the dictionary check - it is based on a dictionary word
Retype new password:
passwd: password updated successfully
root@ubuntu:/home/vboxuser# passwd user5
ne password fails the dictionary check - it is based on a dictionary word
Retype new password:
passwd: password updated successfully
root@ubuntu:/home/vboxuser# passwd user6
New password:
Retype new password:
passwd: password updated successfully
root@ubuntu:/home/vboxuser#
```

- 2. Export above users' hashes into a file names xxx.hash (replace xxx with your MIDAS) and use John the Ripper tool to crack their passwords in wordlist mode (use rockyou.txt).
  - a. Screenshot is on the next page.

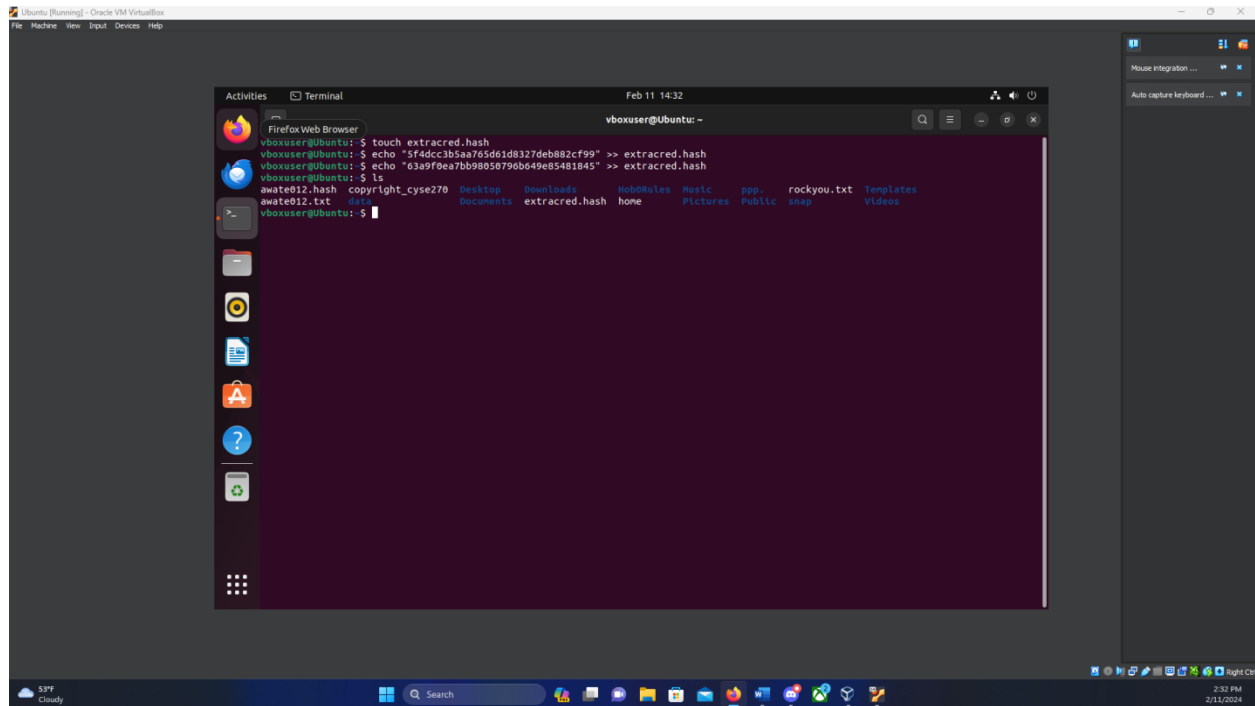


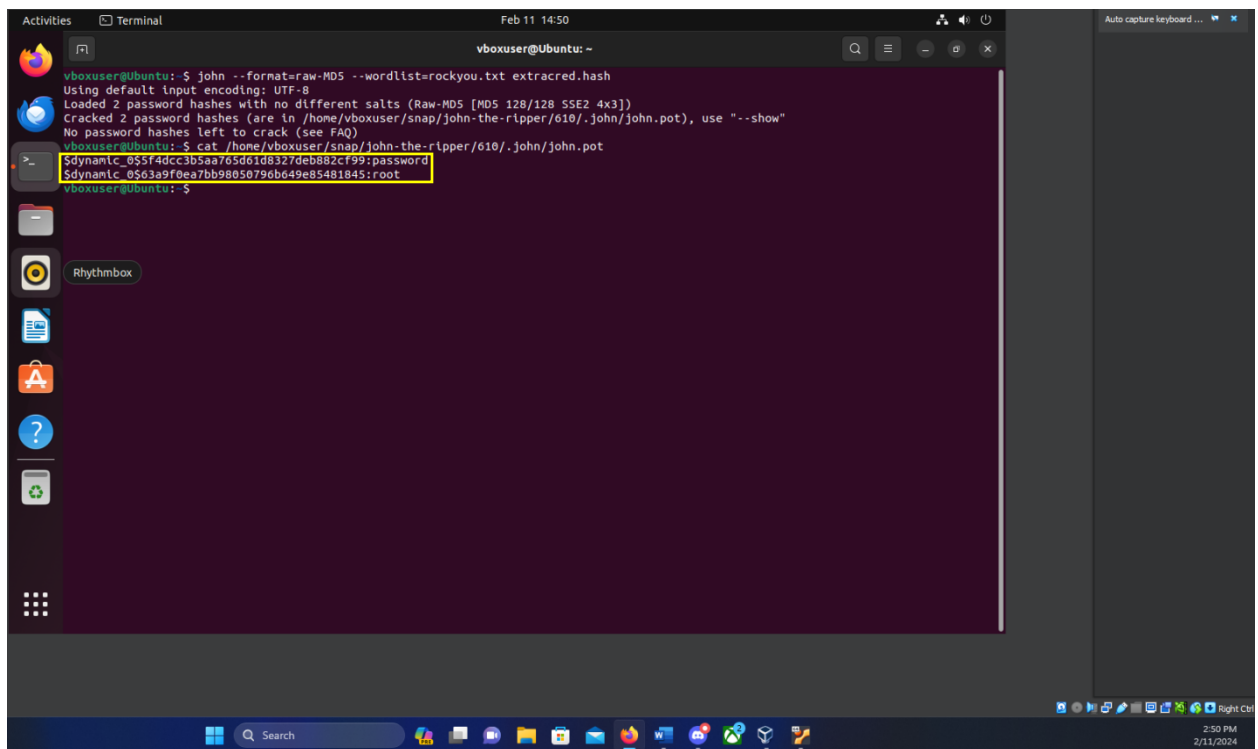
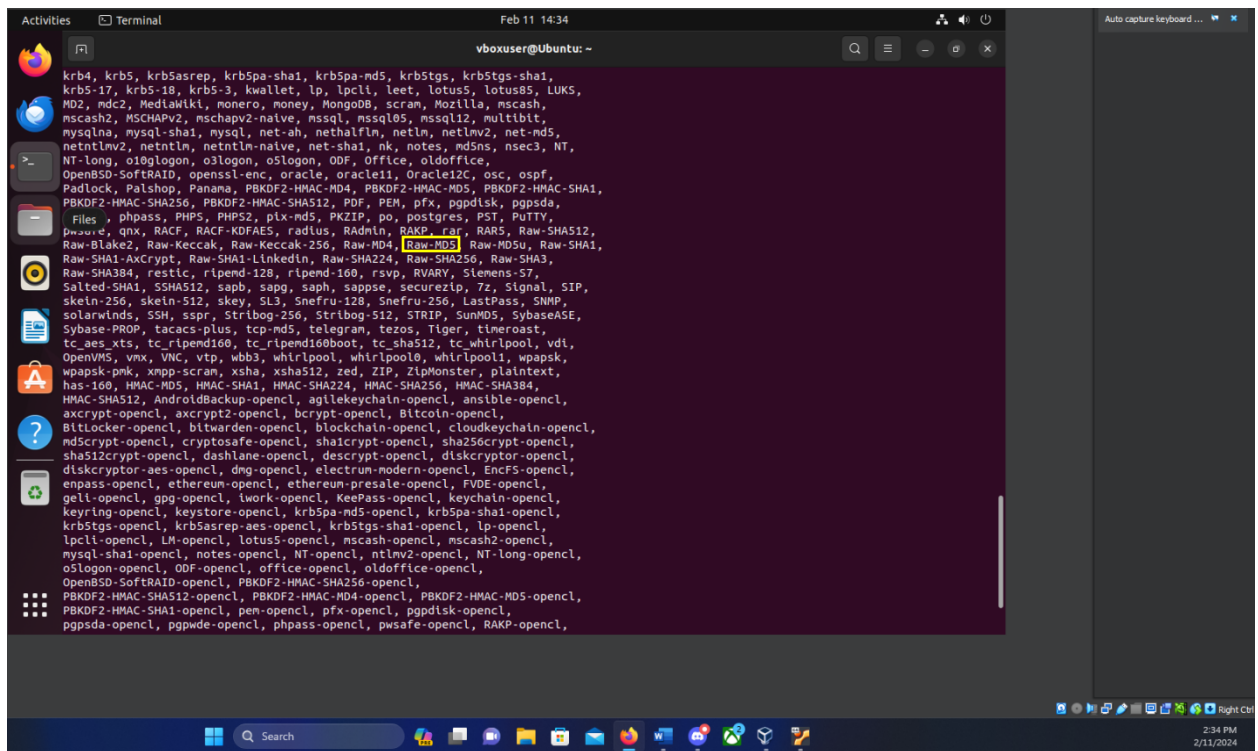
3. Keep your John the Ripper cracking for 10 minutes. How many passwords have been successfully cracked?
  - a. Three passwords were successfully cracked.



## Extra Credit

- Find and use the proper format in John the Ripper to crack the following MD5 hash. Show your steps and results.





- a. The steps I took are as follows:
  - i. I created a hash file
  - ii. I then used the echo command to write the provided MD5 hash information to the file
  - iii. I then utilized the help section for John the Ripper
  - iv. I used the "john -list=formats" command to bring up the format list for John the Ripper.
  - v. In this list I found the format Raw-MD5
  - vi. I then used the command "john -format=raw-MD5 -wordlist=rockyou.txt extracred.hash"
  - vii. The information was decrypted
  - viii. I then display the passwords associated with the decrypted information