Report TryHackMe Linux Fundamentals Part 1

*Task 1: Introduction

We'll be covering some of the history behind Linux and then eventually starting your journey of being a Linux-wizard! This room will have you:

- Running your very first commands in an interactive Linux machine in your browser
- Teaching you some essential commands used to interact with the file system
- Introduce you to how users and groups work on Linux (and what this means for us as penetration testers)

*Task 2: A Bit of Background on Linux

Answer the questions below

Research: What year was the first release of a Linux operating system?

Search google:

Linux(/ˈlɪnʊks/ (nghe) *LEEN-uuks* hay /ˈlɪnʊks/ *LIN-uuks*[9]) là một họ các hệ điều hành được phát hành lần đầu tiên vào ngày 17 tháng 9 năm 1991

➔

Answer the questions below

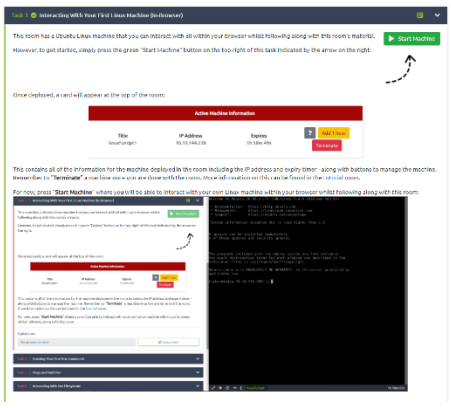
Research: What year was the first release of a Linux operating system?

1991

* Task 3: Interacting With Your First Linux Machine (In-Browser)

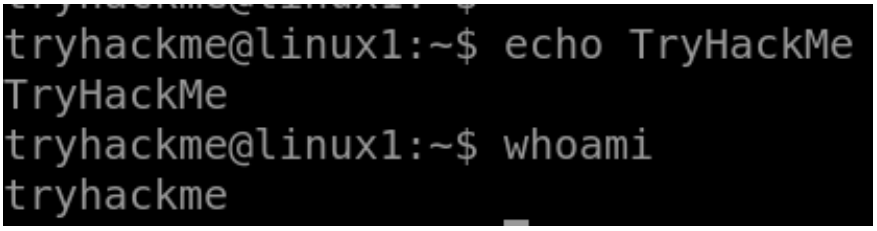
to get started, simply press the green "Start Machine" button on the top-right of this task indicated by the arrow on the right:

➔



*Task 4: Running Your First few Commands

Command	Description
echo	Output any text that we provide
whoami	Find out what user we're currently logged in as!



➔ If we wanted to output the text "**TryHackMe**", what would our command be?

echo TryHackMe — Correct Answer

What is the username of who you're logged in as on your deployed Linux machine?

tryhackme — Correct Answer

*Task 5: Interacting With the Filesystem!

Command	Full Name
ls	listing
cd	change directory
cat	concatenate
pwd	print working directory

➔ On the Linux machine that you deploy, how many folders are there?

4 — Correct Answer

Ta dùng lệnh “ls” để xem danh sách các folfer

➔ Which directory contains a file?

folder4 Correct Answer

Ta dùng lệnh “cd” để di chuyển vào các folder xong ta dùng “ls” để hiển thị các thư mục có trong folder

```
tryhackme@linux1:~$ cd folder4
tryhackme@linux1:~/folder4$ ls
note.txt
tryhackme@linux1:~/folder4$ cd
tryhackme@linux1:~$ cd folder3
tryhackme@linux1:~/folder3$ ls
tryhackme@linux1:~/folder3$
```

➔ What is the contents of this file?

Hello World Correct Answer

Trong folder 4 ta dùng lệnh “cat” để mở ra các rệp văn bản

```
tryhackme@linux1:~$ cat folder4/note.txt
Hello World!
```

➔ Use the cd command to navigate to this file and find out the new current working directory. What is the path?

/home/tryhackme/folder4 Correct Answer

Trong folder4 ta dùng lệnh “pwd” để hiển thị đường dẫn đến vị trí hiện tại.

```
tryhackme@linux1:~/folder4$ pwd
/home/tryhackme/folder4
```

*Task 6: Searching for Files

➔ Use grep on "access.log" to find the flag that has a prefix of "THM". What is the flag?

THM{ACCESS} Correct Answer Hint

Ta dùng câu lệnh “grep ‘lọc’ mục cần lọc” để lọc ra tất cả chuỗi có trong file

```
tryhackme@linux1:~$ grep "THM" access.log
13.127.130.212 - - [04/May/2021:08:35:26 +0000] "GET THM{ACCESS} lang=en HTTP/
1.1" 404 360 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36
 (KHTML, like Gecko) Chrome/77.0.3865.120 Safari/537.36"
tryhackme@linux1:~$
```

*Task 7: An Introduction to Shell Operators

Symbol / Operator	Description
&	This operator allows you to run commands in the background of your terminal.
&&	This operator allows you to combine multiple commands together in one line of your terminal.
>	This operator is a redirector - meaning that we can take the output from a command (such as using cat to output a file) and direct it elsewhere.
>>	This operator does the same function of the operator but appends the output rather than replacing (meaning nothing is overwritten). >

➔ If we wanted to run a command in the background, what operator would we want to use?

&

Correct Answer

Ta dùng lệnh “&” để chạy các tác vụ lớn mất nhiều thời gian ở dưới nền.

➔ If I wanted to replace the contents of a file named "passwords" with the word "password123", what would my command be?

echo password123 > passwords

Correct Answer

Hint

Toán tử “>” được gọi là bộ chuyển hướng đầu ra. Điều này về cơ bản có nghĩa là chúng tôi lấy đầu ra từ một lệnh chúng tôi chạy và gửi đầu ra đó đến một nơi khác. Mặt khác muốn tạo 1 tệp passwords123 với thông báo passwords ta cũng có thể dùng.

```
tryhackme@linux1:~$ echo passwords > passwords123
tryhackme@linux1:~$ ls
access.log  folder1  folder2  folder3  folder4  passwords123
tryhackme@linux1:~$ cat passwords123
passwords
```

➔ Now if I wanted to add "tryhackme" to this file named "passwords" but also keep "passwords123", what would my command be

echo tryhackme >> passwords Correct Answer

Ta dùng toán tử “>>” cũng như toán tử “>” thì “>>” cũng để hieent thị đầu ra nhưng có tính tổng quan hơn vì nó sẽ tạo ra 1 file mới ở dưới file cũ chứ không xóa toàn bộ file cũ và ghi file mới vào như “>”

```
tryhackme@linux1:~$ echo tryhackme >> passwords123
tryhackme@linux1:~$ cat passwords123
passwords
tryhackme
tryhackme@linux1:~$ echo tryhackme1 > passwords123
tryhackme@linux1:~$ cat passwords123
tryhackme1
tryhackme@linux1:~$
```

*Task 8: Conclusions & Summaries

*Task 9: Linux Fundamentals Part 2