


## Task1

**Task 1** Introduction



Welcome to the first part of the "Linux Fundamentals" room series. You're most likely using a Windows or Mac machine, both are different in visual design and how they operate. Just like Windows, iOS and MacOS, Linux is just another operating system and one of the most popular in the world powering smart cars, android devices, supercomputers, home appliances, enterprise servers, and more.

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
- Demonstrate how you can search for files and introduce shell operators

Answer the questions below

Let's get started!

No answer needed

Correct Answer

## Task2

Task 2

A Bit of Background on Linux

### Where is Linux Used?

It's fair to say that Linux is a lot more intimidating to approach than Operating System's (OSs) such as Windows. Both variants have their own advantages and disadvantages. For example, Linux is considerably much more lightweight and you'd be surprised to know that there's a good chance you've used Linux in some form or another every day! Linux powers things such as:

- Websites that you visit
- Car entertainment/control panels
- Point of Sale (PoS) systems such as checkout tills and registers in shops
- Critical infrastructures such as traffic light controllers or industrial sensors

### Flavours of Linux

The name "Linux" is actually an umbrella term for multiple OS's that are based on UNIX (another operating system). Thanks to Linux being open-source, variants of Linux come in all shapes and sizes - suited best for what the system is being used for.

For example, Ubuntu & Debian are some of the more commonplace distributions of Linux because it is so extensible. I.e. you can run Ubuntu as a server (such as websites & web applications) or as a fully-fledged desktop. For this series, we're going to be using Ubuntu.

*Note: Ubuntu Server can run on systems with only 512MB of RAM!*

Similar to how you have different versions Windows (7, 8 and 10), there are many different versions/distributions of Linux.

Answer the questions below

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

☐ 1980

☐ 1985

☐ 1989

☒ 1991

## Task 3

Room progress (50%)

Title	IP Address	Expires	?	Add 1 hour
linuxfund01	10.10.144.238	1h 58m 49s		

Terminate

This contains all of the information for the machine deployed in the room including the IP address and expiry timer - along with buttons to manage the machine. Remember to "**Terminate**" a machine once you are done with the room. More information on this can be found in the [tutorial](#) room.

For now, press "**Start Machine**" where you will be able to interact with your own Linux machine within your browser whilst following along with this room:

Get started with your first Linux machine

This room has a Ubuntu Linux machine that you can interact with all within your browser whilst following along with this room tutorial.

Remember to get security checks passed the green "Testing" button on the top right of this task by clicking the arrow on the right.

Once deployed, a card will appear at the top of the room.

linuxfund01

IP Address

10.10.144.238

Expires

1h 58m 49s

Terminate

Click on the card to see more information for the machine assigned to the room including the IP address and expiry timer, along with buttons to manage the machine. Remember to "Terminate" machines once you are done with the room. More information on this can be found in the [tutorial](#) room.

Are you, pro? "Start Machine" where you will be able to interact with your own Linux machine within your browser whilst following along with this room.

Update me...

No updates needed

Get updates

Task 1

Getting Your First Linux Commands

Task 2

Page and Navigation

Task 3

Interacting With the OS Update

linuxfund01

10.10.144.238

1h 58m 49s

Terminate

Welcome to Ubuntu 20.04.6 LTS (GNU/Linux 5.15.0-1064-aws x86\_64)

\* Documentation: <https://help.ubuntu.com>  
\* Management: <https://landscape.canonical.com>  
\* Support: <https://ubuntu.com/pro>

System information as of Wed Mar 26 16:35:37 UTC 2025

System load: 0.54 Processes: 118  
Usage of /: 27.8% of 9.62GB Users logged in: 0  
Memory usage: 38% IPv4 address for ens5: 10.10.82.67  
Swap usage: 0%

\* Ubuntu Pro delivers the most comprehensive open source security and compliance features.

<https://ubuntu.com/aws/pro>

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.  
See <https://ubuntu.com/esm> or run: sudo pro status

The list of available updates is more than a week old.  
To check for new updates run: sudo apt update

tryhackme@linux1:~\$

Answer the questions below

I've deployed my first Linux machine!

power needed

Correct Answer

## Task 4

We need to be able to do basic functions like navigate to files, output their contents and make files! The commands to do so are self-explanatory (once you know what they are of course...)

Let's get started with two of the first commands which I have broken down in the table below:

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

See the snippets below for an example of each command being used

```
tryhackme@linux1:~$ echo "Hello Friend!"
```

```
tryhackme@linux1:~$ whoami
```

Try this on your [Linux](#) machine now!

Answer the questions below

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

✓ Correct Answer

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

✓ Correct Answer

🔍 Hint

## Task 5

Answer the questions below

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

✓ Correct Answer

Which directory contains a file?

✓ Correct Answer

🔍 Hint

What is the contents of this file?

✓ Correct Answer

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

✓ Correct Answer

Task 6 ☐ Searching for Files

🎉 Group Whop! Your answer is correct

Ubuntu Pro delivers compliance features.

<https://ubuntu.com/aws/pro>

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.  
See <https://ubuntu.com/esm> or run: `sudo apt update`

The list of available updates is more than a week old.  
To check for new updates run: `sudo apt update`

```
tryhackme@linux1:~$ ls
```

```
access.log  folder1  folder2  folder3  folder4
```

```
tryhackme@linux1:~$ cd folder1
```

```
tryhackme@linux1:~/folder1$ ls
```

```
tryhackme@linux1:~/folder1$ cd ../folder2
```

```
tryhackme@linux1:~/folder2$ ls
```

```
tryhackme@linux1:~/folder2$ cd ../folder3
```

```
tryhackme@linux1:~/folder3$ ls
```

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

```
tryhackme@linux1:~/folder4$ ls
```

```
note.txt
```

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

```
Hello World!
```

```
tryhackme@linux1:~/folder4$ ^C
```

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

```
/home/tryhackme/folder4
```

```
tryhackme@linux1:~/folder4$ ^C
```

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

## Task 6

### Answer the questions below

Use grep on "access.log" to find the flag that has a prefix of "THM". What is the flag? **Note:** The "access.log" file is located in the "/home/tryhackme/" directory.

✓ Correct Answer

🔍 Hint

And I still haven't found what I'm looking for!

🏆 Complete

Task 7 An Introduction to Shell Operators

Task 8 Conclusions & Summaries

```
The list of available updates is more than a week old.
To check for new updates run: sudo apt update

tryhackme@linux1:~$ ls
access.log folder1 folder2 folder3 folder4
tryhackme@linux1:~$ cd folder1
tryhackme@linux1:~/folder1$ ls
tryhackme@linux1:~/folder1$ cd ../folder2
tryhackme@linux1:~/folder2$ ls
tryhackme@linux1:~/folder2$ cd ../folder3
tryhackme@linux1:~/folder3$ ls
tryhackme@linux1:~/folder3$ cd ../folder4
tryhackme@linux1:~/folder4$ ls
note.txt
tryhackme@linux1:~/folder4$ cat note.txt
Hello World!
tryhackme@linux1:~/folder4$ ^C
tryhackme@linux1:~/folder4$ pwd
/home/tryhackme/folder4
tryhackme@linux1:~/folder4$ ^C
tryhackme@linux1:~/folder4$ cd -
/home/tryhackme/folder3
tryhackme@linux1:~/folder3$ cd
tryhackme@linux1:~$ grep "THM" access.log
grep: access.log: No such file or directory
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" 360 "-" Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML like Gecko) Chrome/77.0.3865.120 Safari/537.36
```

## Task 7

### Answer the questions below

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

✓ Correct Answer

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

✓ Correct Answer

🔍 Hint

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

✓ Correct Answer

🔍 Hint

Now use the deployed Linux machine to put these into practice

✓ Correct Answer

## Task 8

Nice work on getting to this stage! We covered quite a bit for your first interactions with [Linux](#). However, these are the most essential/functions you're going to be using whenever you interact with a [Linux](#) machine.

I hope this room hasn't been too daunting for you to power-on through with. It's as I previously mentioned, you're going to become familiar with these things very quickly because of how often you're going to be using them.

To quickly recap, we've covered the following:

- Understanding why [Linux](#) is so commonplace today
- Interacting with your first-ever [Linux](#) machine!
- Ran some of the most fundamental commands
- Had an introduction to navigating around the filesystem & how we can use commands like `find` and `grep` to make finding data even more efficient!
- Power up your commands by learning about some of the important shell operators.

Take some time to have a play around in this room. When you feel a little bit more comfortable, progress onto [Linux Fundamentals Part 2](#)

Answer the questions below

I'll have a play around!

No answer needed

✓ Correct Answer

## Task 9

### Task 9 ✓ Linux Fundamentals Part 2

Visit part two of the [Linux](#) fundamentals series here! <https://tryhackme.com/room/linuxfundamentalspart2>

Answer the questions below

Terminate the machine deployed in this room from task 3.

No answer needed

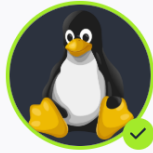
✓ Correct Answer

Join [Linux Fundamentals Part 2!](#)

No answer needed

✓ Correct Answer

finish



Congratulations on completing Linux Fundamentals Part 1!!! 🎉

Points earned 🔥 88	Completed tasks ✅ 9	Room type 👤 Walkthrough	Difficulty 📖 Info	Streak 🔥 1
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