Name: Onkar vikas mhaskar

Mail: onkarvmhaskar@gmail.com

@senselearner

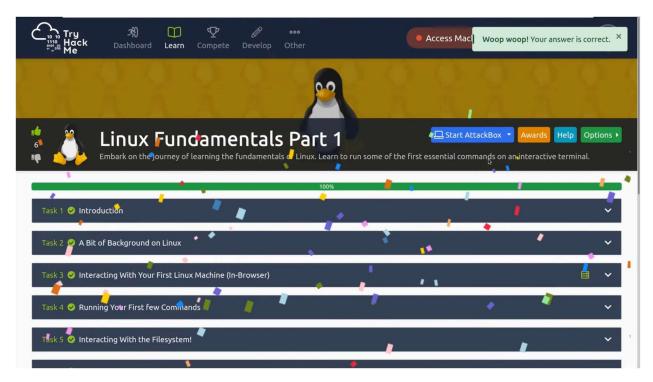
1. Linux fundamentals part 1:

The Linux Fundamentals Part 1 room is designed to introduce fundamental concepts of the Linux operating system, including basic commands, file system navigation, user management, and permissions. This exercise aimed to develop foundational skills in Linux system administration and command-line usage.

The primary objective of the Linux Fundamentals Part 1 exercise was to provide participants with a hands-on introduction to the Linux operating system. The exercise focused on basic Linux commands, file system navigation, user management, and understanding file permissions. The goal was to help participants become comfortable with the Linux command line and essential system administration tasks.

During the Linux Fundamentals Part 1 exercise, the following key topics and tasks were covered:

- 1.Linux Basics: An introduction to the Linux operating system, its history, and key principles.
- 2.Command-Line Interface (CLI): Familiarity with the Linux command line interface, including the terminal and basic commands like ls, cd, pwd, mkdir, touch, and rm.
- 3. File System Navigation: Learning how to navigate the Linux file system, move between directories, and identify the current working directory.
- 4. File Operations: Understanding file operations, including creating, modifying, and deleting files and directories.
- 5.User Management: Exploring user and group management, including creating and deleting users, changing passwords, and modifying group memberships.
- 5. File Permissions: Gaining knowledge of Linux file permissions, including the chmod command to change permissions and the use of ls -l to view file permission details.



Conclusion:

The Linux Fundamentals Part 1 exercise on TryHackMe served as an excellent introduction to the fundamental concepts of the Linux operating system. Participants were introduced to the Linux command line, learned basic file system navigation, and gained insights into user management and file permissions. This foundational knowledge is essential for anyone interested in working with Linux systems or pursuing a career in system administration or cybersecurity.

2. Linux fundamentals part 2:

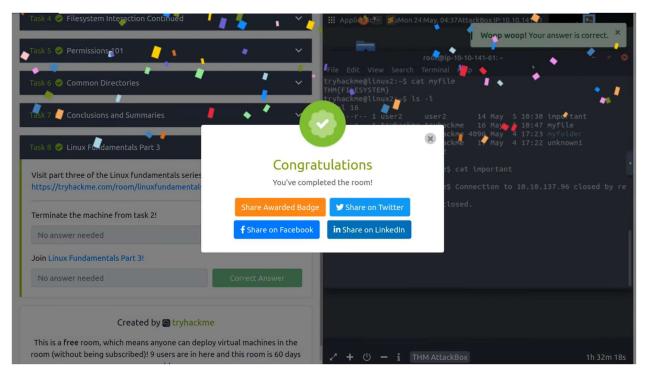
Building upon the concepts introduced in Part 1, Linux Fundamentals Part 2 delves deeper into the Linux operating system, covering topics such as processes, services, package management, and basic shell scripting. The exercise aimed to expand participants' knowledge and skills in Linux system administration and command-line usage.

The primary objective of the Linux Fundamentals Part 2 exercise was to provide participants with a more comprehensive understanding of the Linux operating system's advanced concepts and functionalities. The exercise focused on processes, services, package management, and introductory shell scripting. The goal was to help participants become proficient in managing and customizing Linux systems.

During the Linux Fundamentals Part 2 exercise, the following key topics and tasks were covered:

- 1.Processes: An exploration of Linux processes, including process management commands like ps, top, kill, and killall. Participants learned how to view and manage running processes.
- 2. Services: An introduction to Linux services, including starting, stopping, and restarting services using commands like systemctl. Participants gained insights into managing system services effectively.

- 3. Package Management: An overview of Linux package management using package managers like apt (for Debian/Ubuntu-based systems) and yum (for Red Hat/CentOS-based systems). Participants learned how to install, update, and remove software packages.
- 4.Shell Scripting: Introduction to basic shell scripting concepts, including writing and executing simple shell scripts. Participants practiced automating tasks and performing basic system administration using scripts.



Conclusion:

The Linux Fundamentals Part 2 exercise on TryHackMe served as a valuable continuation of the Linux learning journey. Participants expanded their knowledge beyond the basics and gained a deeper understanding of Linux processes, services, package management, and shell scripting. These skills are crucial for effective system administration and are highly relevant in the field of cybersecurity and IT operations.

3. Linux fundamentals part 3:

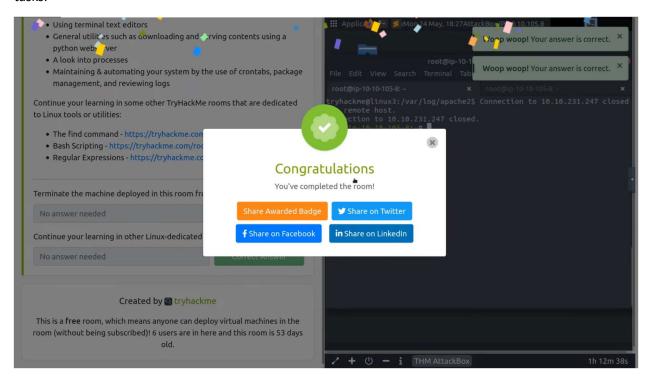
Building upon the concepts introduced in Parts 1 and 2, Linux Fundamentals Part 3 dives even deeper into advanced Linux topics, including system maintenance, networking, security, and scripting. The exercise aimed to further expand participants' knowledge and skills in Linux system administration and command-line usage.

The primary objective of the Linux Fundamentals Part 3 exercise was to provide participants with an advanced understanding of Linux operating systems and associated practices. The exercise focused on system maintenance, networking configuration, security, and more advanced shell scripting. The goal

was to equip participants with the skills required to effectively manage, secure, and automate tasks on Linux systems.

During the Linux Fundamentals Part 3 exercise, the following key topics and tasks were covered:

- 1.System Maintenance: Advanced system maintenance tasks, including managing log files, configuring system time settings, and monitoring system performance using tools like systemd and timedatectl.
- 2.Networking Configuration: In-depth exploration of Linux networking, covering topics such as network configuration files, DHCP, static IP assignment, and DNS configuration.
- 3.Security: Advanced security practices, including user and group management, setting file permissions, configuring firewall rules using iptables, and implementing basic intrusion detection measures.
- 4. Advanced Shell Scripting: Introduction to more advanced shell scripting techniques, including conditional statements, loops, and functions. Participants practiced writing complex scripts to automate tasks.



Conclusion:

The Linux Fundamentals Part 3 exercise on TryHackMe served as an essential step in advancing participants' expertise in Linux system administration. By delving into topics like system maintenance, networking configuration, security practices, and advanced scripting, participants gained a holistic understanding of Linux systems' management and automation.