

## Kamilimu cybersecurity track: Cohort 9

May 31, 2025

### Introduction to Offensive and Defensive Technologies: Take Home assignments

This worksheet provides a line up of labs/"rooms" available on the TryHackMe platform that have been provided as your take-home assignment following this class.

You can complete this assignment on the TryHackMe environment "AttackBox" or within your Windows and/or Linux systems. Should you choose to complete the assignments within your machine, follow the VPN setup instructions provided by TryHackMe here:

<https://tryhackme.com/room/openvpn>.

Detailed help instructions on OpenVPN setup can be found here:

<https://help.tryhackme.com/en/articles/6611809-getting-started-with-openvpn>

## Part 1: Offensive security: TryHackMe tooling and technique labs

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### Web application assessments

1. OWASP top 10 (2021):
  - a. <https://tryhackme.com/room/owasptop102021>
2. Intro to web application hacking:.
  - a. <https://tryhackme.com/module/intro-to-web-hacking>

### Network security

1. Network services:
  - a. <https://tryhackme.com/room/networkservices>
2. Nmap (beginner):
  - a. <https://tryhackme.com/room/nmap01>

## Part 2: Defensive security: TryHackMe tooling and technique labs

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### Network security

1. Traffic analysis essentials:
  - a. <https://tryhackme.com/room/trafficanalysisessentials>
2. Intro to SIEM:
  - a. <https://tryhackme.com/room/introtosiem>
3. Junior Security Analyst introduction:
  - a. <https://tryhackme.com/room/jrsecanalystintrouxo>

### DFIR (Digital Forensics & Incident Response)

1. Intro to digital forensics:
  - a. <https://tryhackme.com/room/introdigitalforensics>
2. Digital forensics & incident response:
  - a. <https://tryhackme.com/module/digital-forensics-and-incident-response>
3. Incident response process:
  - a. <https://tryhackme.com/room/incidentresponseprocess>

## Bonus Challenges: Combination (offensive/defensive) rooms

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- **Web application assessment:** [Juicydetails](#) is a room that builds on lessons from web application assessment (offensive) and teaches how to assess the OWASP Juice Shop in the aftermath of a “breach”. Ideally complete this lab after doing the Intro to web hacking and owasp juice shop labs.
- **Network assessment:** [H4cked](#) is a room that combines knowledge of network defense and exploitation to solve the room. Expect to use tools such as Wireshark and scripting languages of your choice.

## Important Notes

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- Part 1 & 2 are recommended for all learners to build a solid foundation.
- The Bonus challenges are optional and designed for those who want an in-depth experience. Feel free to explore these at your own pace.
- Research widely (including beyond class material) to solve these challenges.
- Take your time and experiment.
- Remember, if you encounter any difficulties, please don't hesitate to reach out for assistance.
- Have fun!