



Today, we will be you will be using a pre-configured headless Linux server and applying the skills we've learned over the past three weeks to complete a fun activity known as **Capture the Flag (CTF)**.



Setting up the headless server:

While the machine is running from your desktop, you have a few option for connecting to it:

- 1. You can use the VM's GUI and login directly.
- 2. If you would like to work from the **command line**, you can connect using ssh. (As demonstrated by the instructor.)



### **CTF Instructions and Rules**



You can work alone or in teams.



If working with a team, all members must participate equally.



To complete this CTF, you will launch a headless server and login.



All previous material and internet resources are fair game.



While each member can work on different steps, most steps must be completed in order.



Professors and TAs will not be providing hints or assistance unless there are technical issues that prevent the VMs from running correctly.

### Hints



Take notes of anything that you find interesting.



When you find a flag, you will see this formant: flag\_1:97df27aec8c251503f5e3749eb2ddea2



You will need to find **eight** flags in total. The first seven flags from the system combine to makeup the final flag.



Write down any credentials you find. You may need to use them later.



# Let's Get Started: **2 Hours**

**CLICK TO START TIMER** 



Times Up! Let's Review.

Next week, we will begin to learn system administration and security tools for one of the most popular operating systems: **Windows**.

For that unit, we need to use a **new Azure lab environment**.



## Instructor Demonstration Azure Access for Windows Lab Environment

#### Azure Lab Credentials:

For Day 1 of Windows, you will use only the Windows 10 machine. Select it in the center pane, then click Start in the bottom-right, near where you clicked Delete Saved State.

When the machine has started, click Connect, and log in with the following credentials:

- Credentials for the Windows 10 VM for Day 1 Activities:
  - O Username: sysadmin
  - o Password: cybersecurity

Important: when you are done with your lab, you will need to:

- Turn off the Windows VMs inside of Hyper-V.
- Close the RDP connection to turn off the host VM.