

Flashed the pi with ubuntu server 24.04.1 LTS 64-bit and default settings.

Commands ran in order were:

```
sudo apt update
sudo apt upgrade
---- WIFI INSTALL ----
sudo apt install network-manager unzip
lsblk
lsblk
mkdir ~/usb_stick sudo mount /dev/sda1 ~/usb_stick
cp -r ~/usb_stick/eduroam.zip ~/.
sudo umount /dev/sda1
unzip eduroam.zip
cd ~/eduroam
sudo chmod +x setup.sh
sudo ./setup.sh
---- GUI INSTALL ----
sudo apt install xfce4 xinit firefox
sudo apt-get install lightdm
sudo apt-get install ubuntu-session
sudo usermod -a -G tty ubuntu
sudo vim /etc/X11/Xwrapper.config
sudo vim /etc/lightdm/lightdm.conf
sudo reboot
----- ESP23C3 SETUP & CODING -----
sudo apt-get install fish neovim g++ git wget \
    flex bison gperf python3 python3-venv cmake \
    ninja-build ccache libffi-dev libssl-dev \
    dfu-util libusb-1.0-0
mkdir -p ~/esp
cd ~/esp
```

```
git clone --recursive https://github.com/espressif/esp-idf.git
cd ~/esp/esp-idf
./install.sh esp32c3
. export.sh
cp -a examples/get-started/hello_world ~/esp/
cp -a examples/get-started/blink ~/esp/
cd ~/esp/hello_world/main
vim hello_world_main.c
cd ..
idf.py set-target esp32c3
sudo usermod -aG tty ubuntu
sudo usermod -aG dialout ubuntu
newgrp dialout
idf.py -p /dev/ttyACM0 flash monitor
cd ~/esp/esp-idf
./install.sh esp32c3
. export.sh
cd ~/esp/blink
idf.py set-target esp32c3
idf.py menuconfig
sudo usermod -aG tty ubuntu
sudo usermod -aG dialout ubuntu
newgrp dialout
idf.py -p /dev/ttyACM0 flash monitor
```

All parts of this lab ran relatively smoothly. Wifi was obtained through a usb stick and everything else was done from the command line.