Installing Kali Linux on a Raspberry Pi

How to install Kali Linux on a Raspberry Pi and configure it for CyberLions cybersecurity scenarios

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Materials Needed

Hardware:

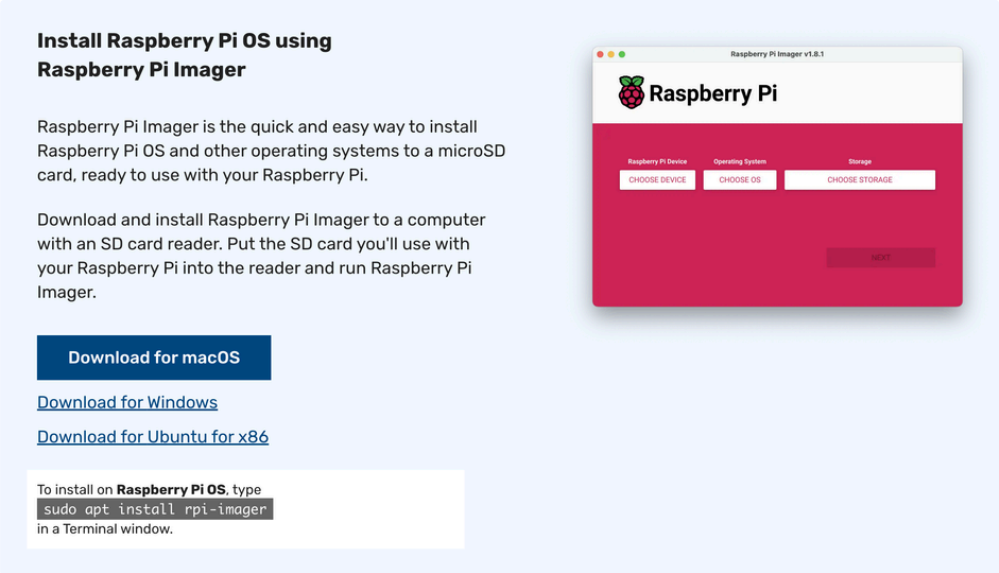
- Raspberry Pi
- Ethernet Cable
- Monitor
- Keyboard
- Mouse
- Raspberry Pi HDMI Cable
- Power Supply
- MicroSD Card
- MicroSD Card Reader
- Personal Computer

Software:

- Raspberry Pi Imager

Kali Linux Installation onto Raspberry Pi- macOS

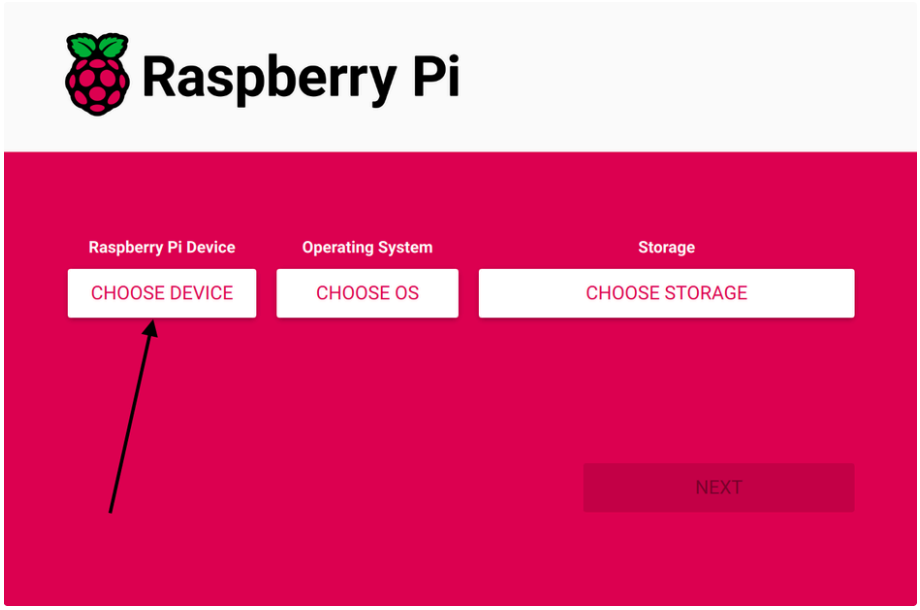
1. Visit Raspberry Pi OS – Raspberry Pi on your personal computer to download the Raspberry Pi Imager
   a. Download for your personal computer's operation system (This tutorial is for macOS)



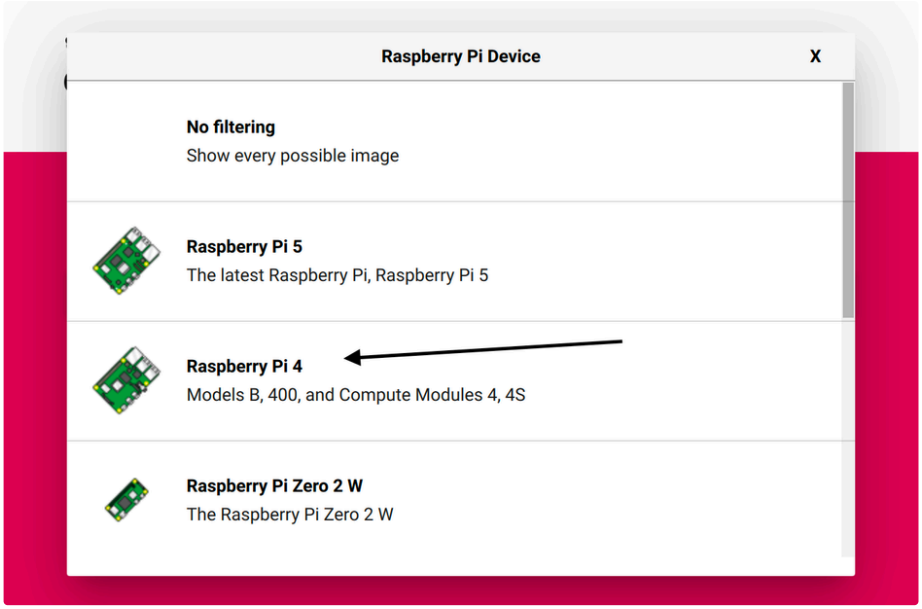
2. Connect your MicroSD Card to your computer
   a. If you do not have a card reader built into your device, connect an adapter such as this

This adapter is overkill for this specific task, but I highly recommend it if you need ethernet, SD, microSD, USB-C, two HDMI ports, three USB ports, and a headphone jack

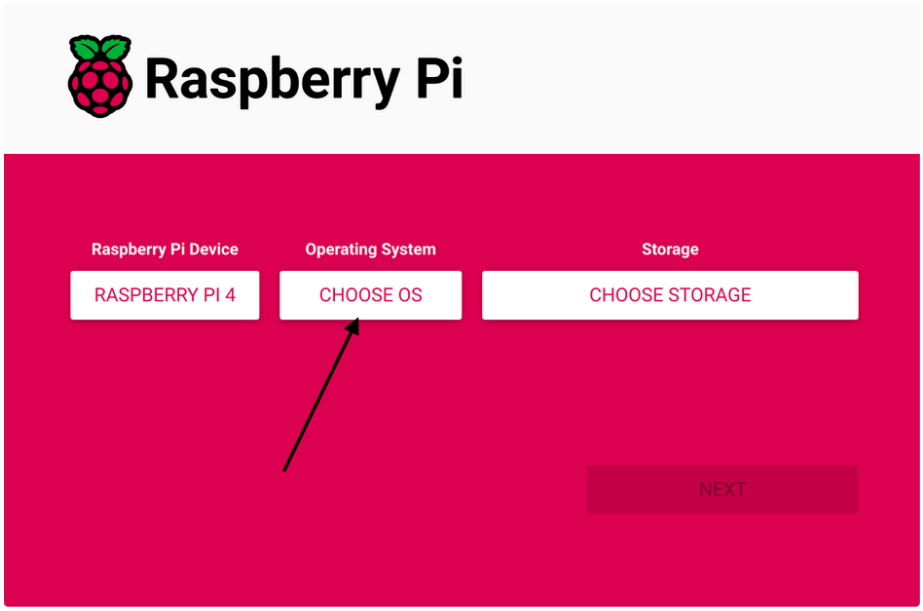
3. Open the Imager application after following the installation instructions
4. Click on **Choose Device**



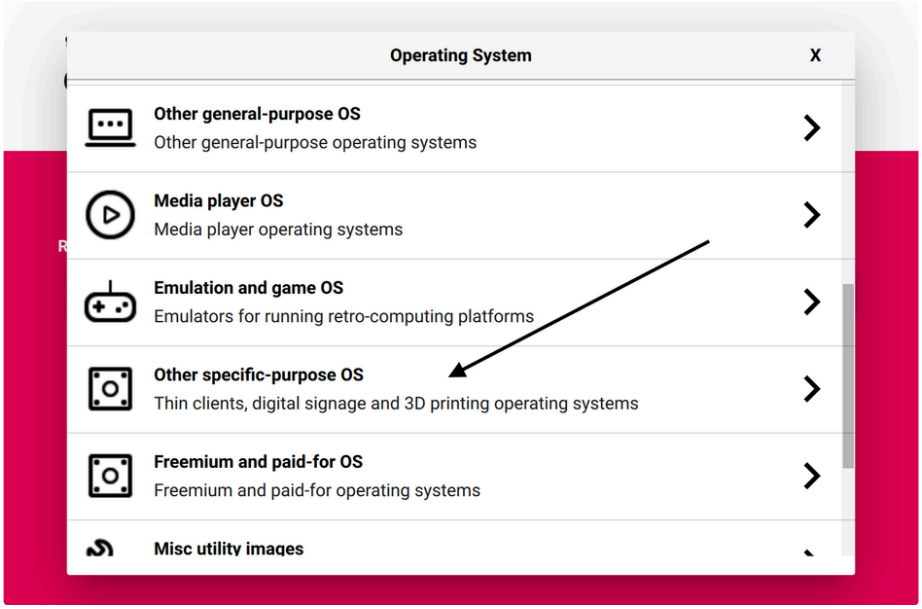
5. Select your specific Raspberry Pi device. (Should be Raspberry Pi 4)



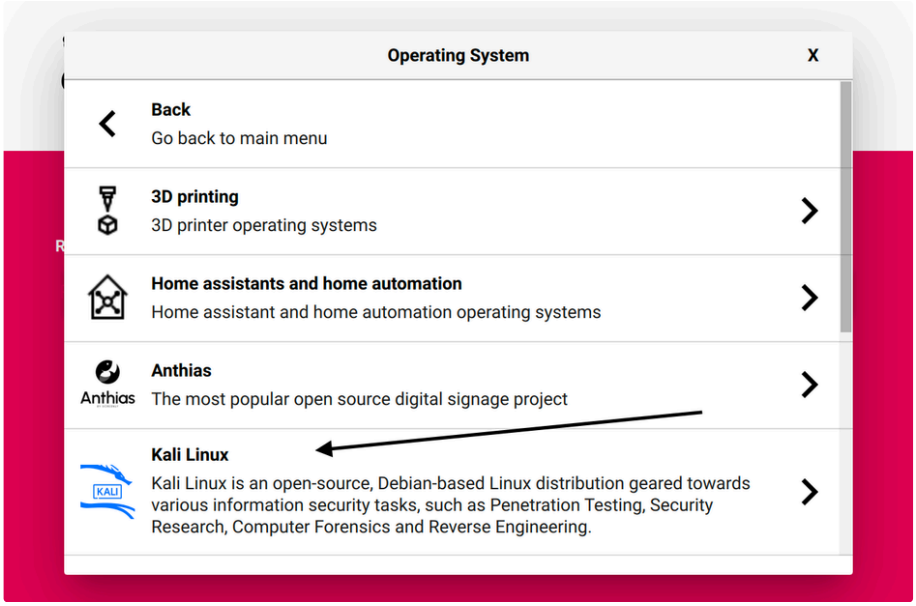
6. Select **Choose OS**



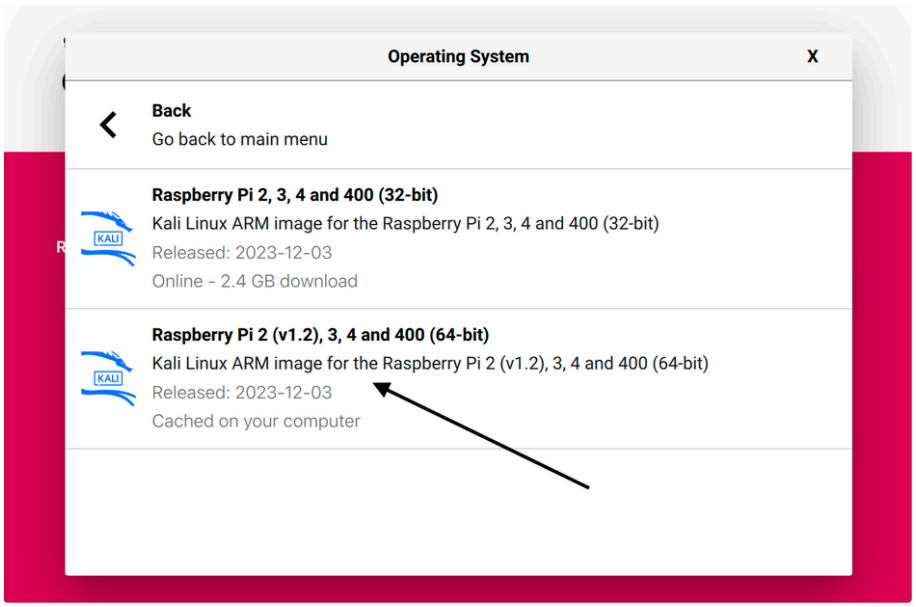
7. Scroll down and select **Other specific-purpose OS**



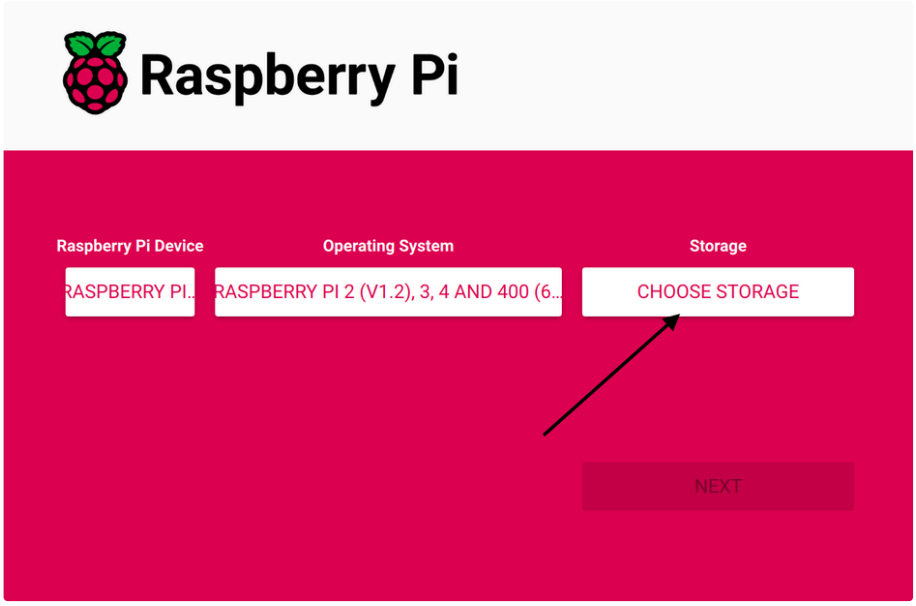
8. Select **Kali Linux**



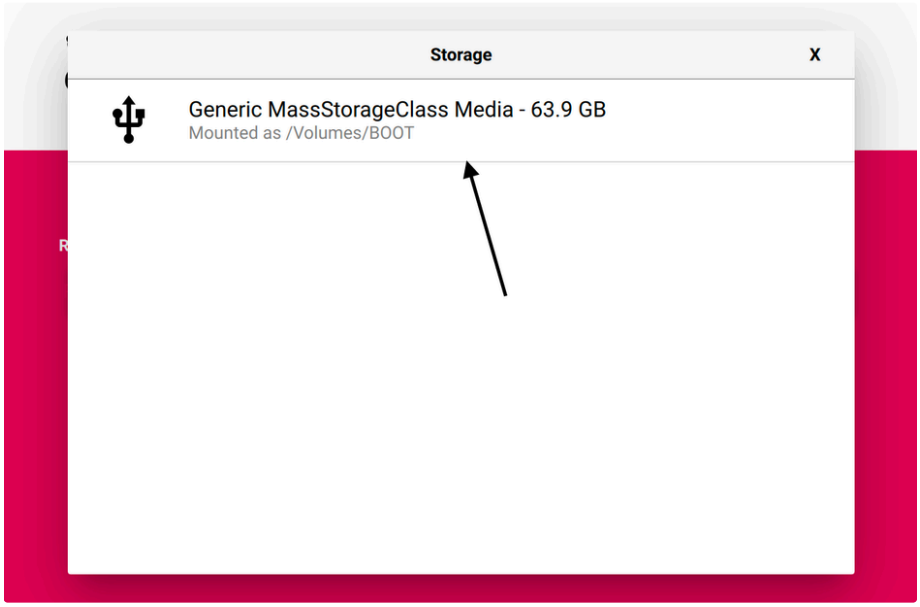
9. Select the version specific to your device (Should be **Raspberry Pi 2(v1.2), 3, 4, and 400 (64-bit)**)



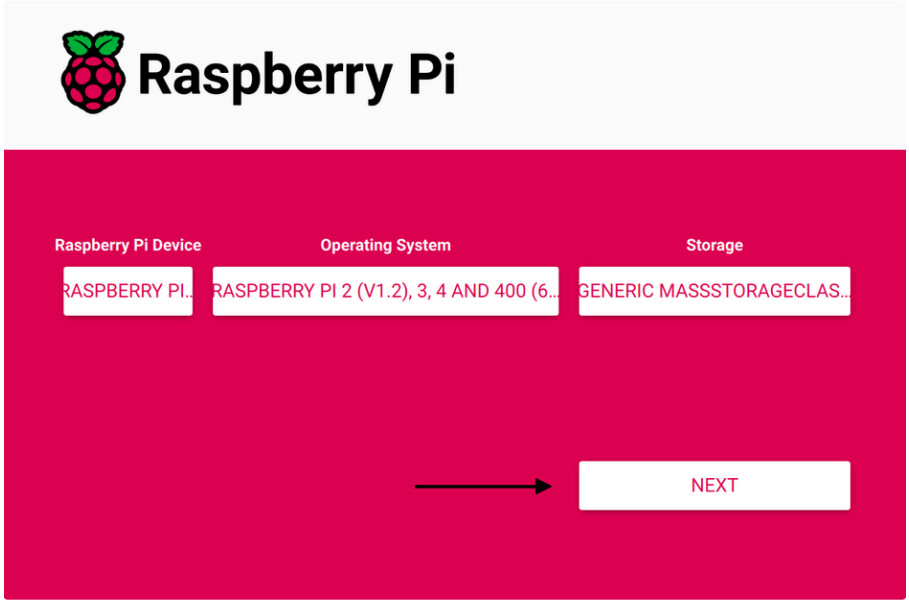
10. Select **Choose Storage**



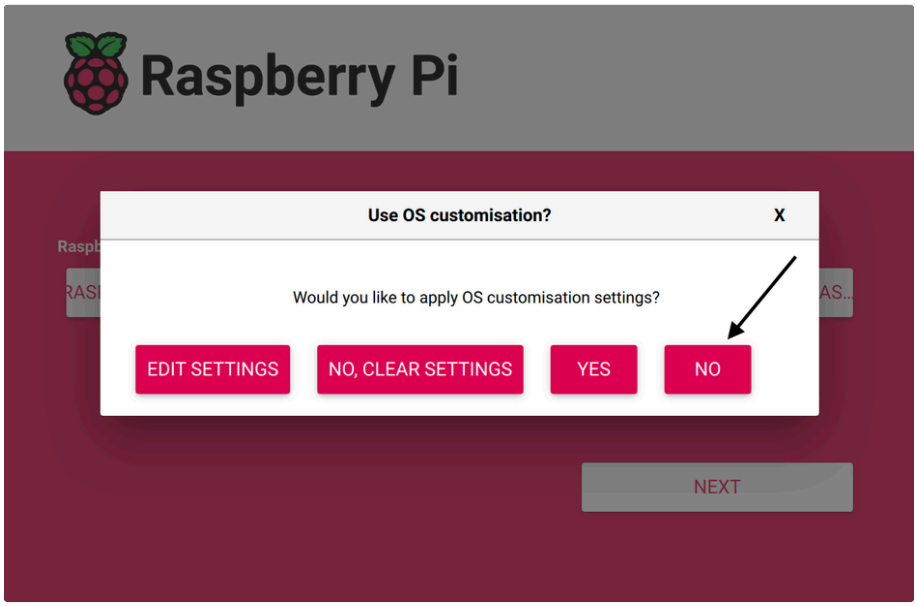
11. You should see your MicroSD card appear, given that it is connected to your computer. Select it as your storage



12. Select **Next**

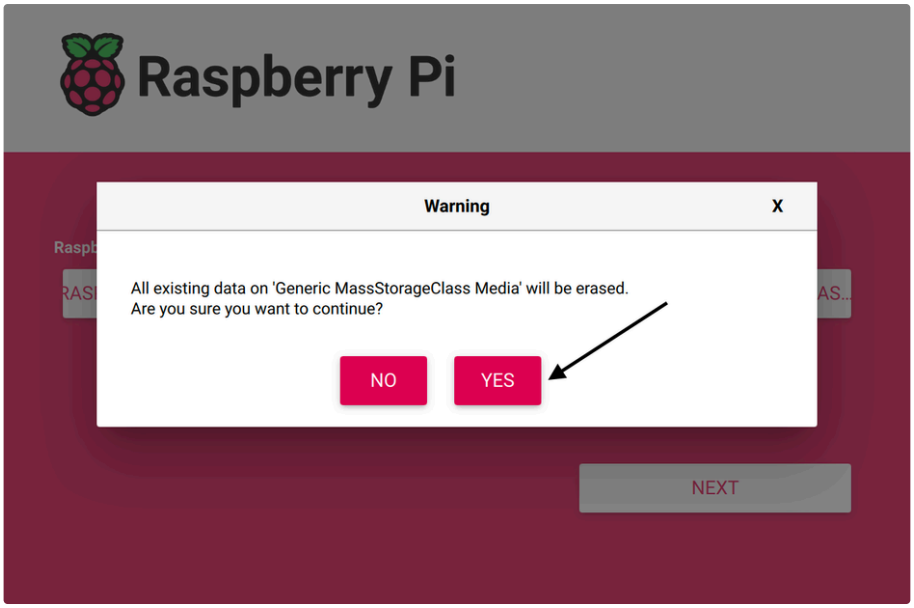


13. You may be prompted with a *Use OS Customization?* menu. Select **No**

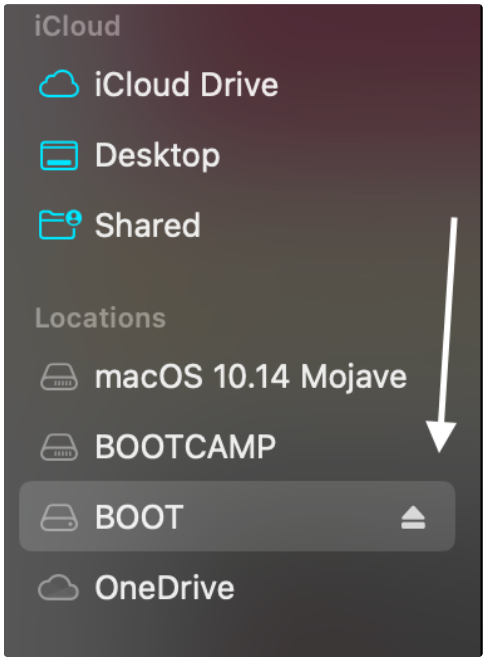


⚠ If you have used this MicroSD card in the past, the Imager will erase **ALL EXISTING DATA** on it. Double check you do not have any important files stored on it before continuing.

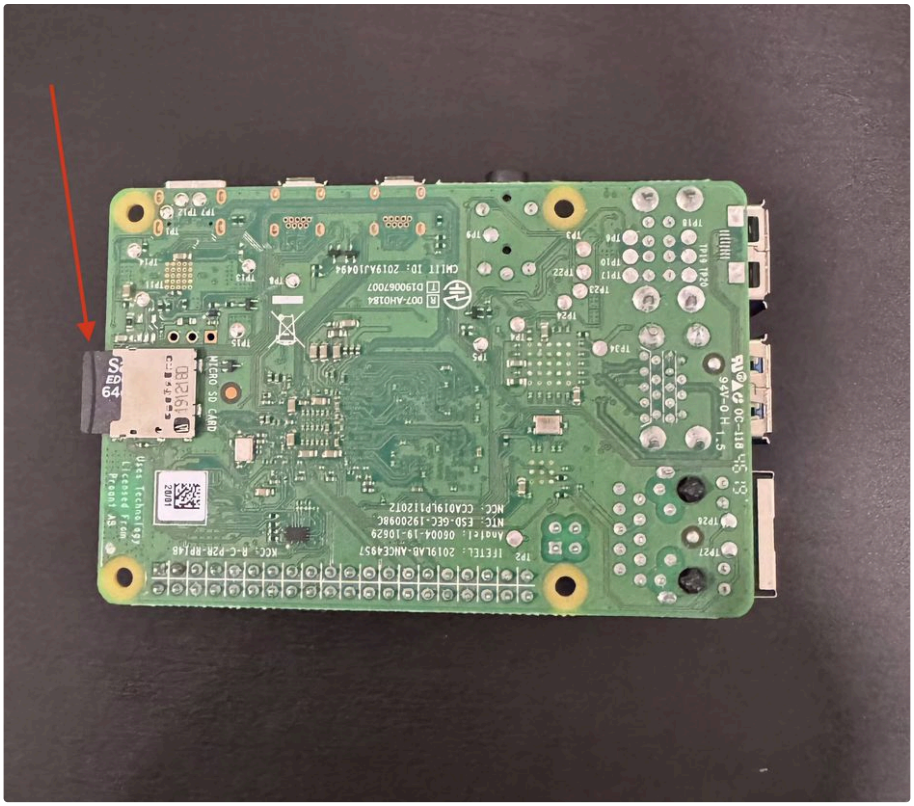
14. You will be prompted with a Warning, given you are comfortable wiping the MicroSD card, click **Yes**



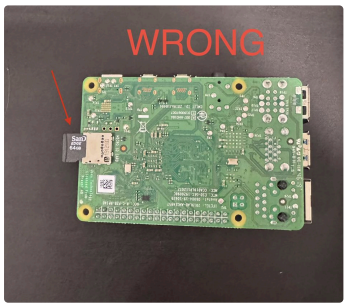
15. The download process will start. It may take several minutes to complete. Once finished, eject the MicroSD card if it is still showing up within Finder



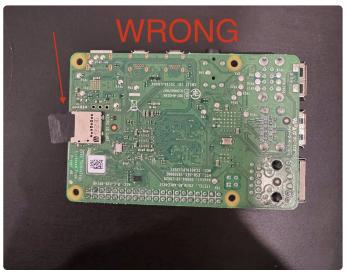
16. After ejecting, remove the MicroSD card from your computer and insert it into the Raspberry Pi. Make sure to keep the Raspberry Pi unplugged while inserting or removing the MicroSD card. Be careful handling the Raspberry Pi. Only hold it from it's edges. The MicroSD slot is on the back of the Raspberry Pi



⚠ There are wrong ways to insert a MicroSD card! If your MicroSD card is not inserted exactly as shown above, it will not work and may break the card and Raspberry Pi

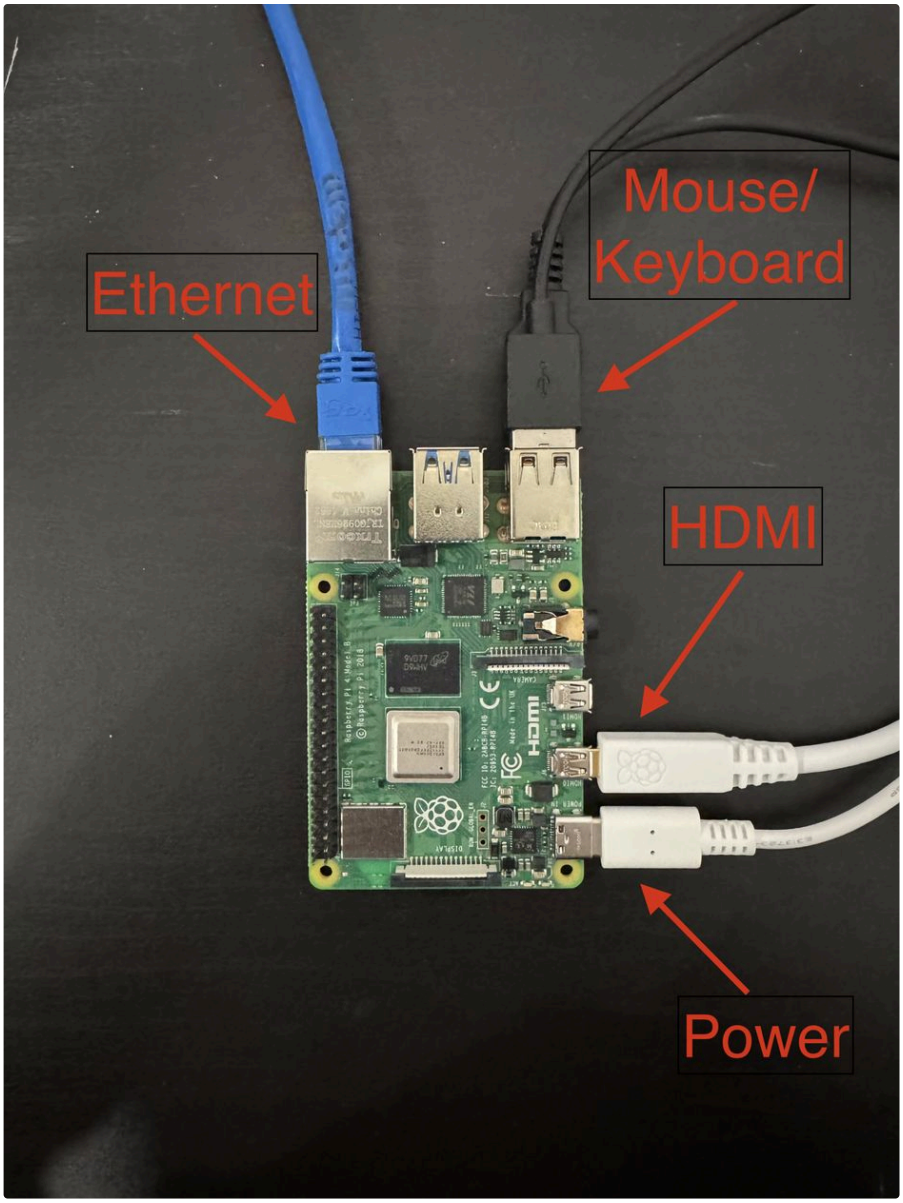


Example of MicroSD not inserted fully



Example of MicroSD inserted upside-down

17. After inserting the MicroSD card, connect the HDMI cable to the Raspberry Pi and your monitor, connect the ethernet cable to the Raspberry Pi (Leave the other side unplugged until ready to plug into other device), and connect a mouse and keyboard to the USB ports available



A few moments after powering on, you should see Kali Linux start up on your monitor. The default login for Kali Linux is:

Username: Kali

Password: Kali