

# Install the Ubuntu

How to install the Ubuntu 22.04



# Agenda

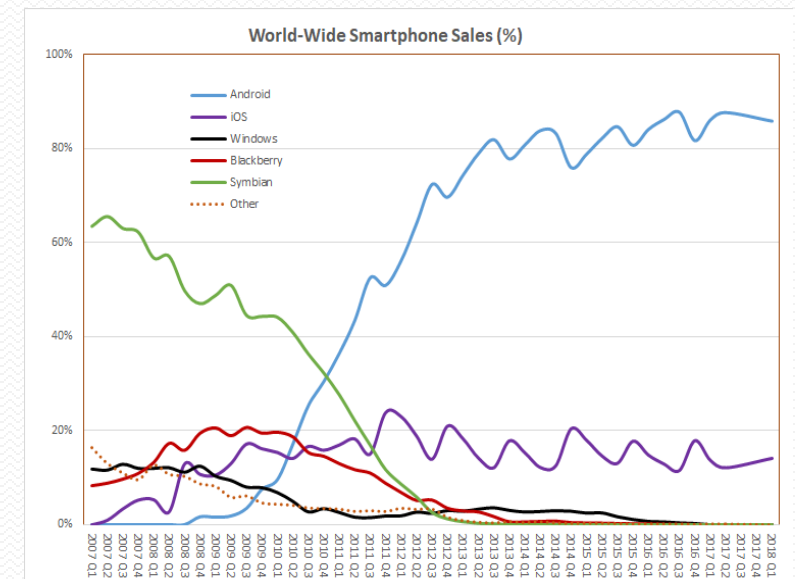
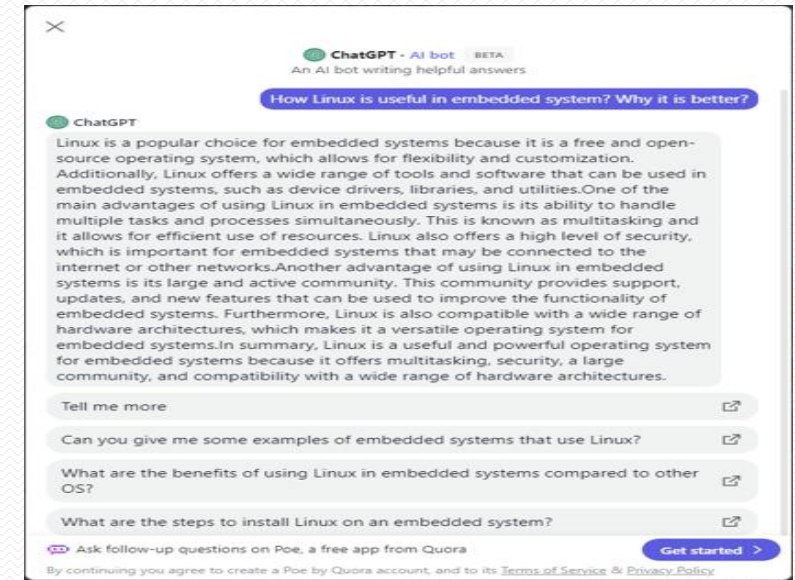
- *Why we select the Linux?*
- *Make the Booting Disk*
- *Settings for the BIOS*
- *Install the Ubuntu 22.04*



Why we select the Linux?

# Linux on Embedded Systems

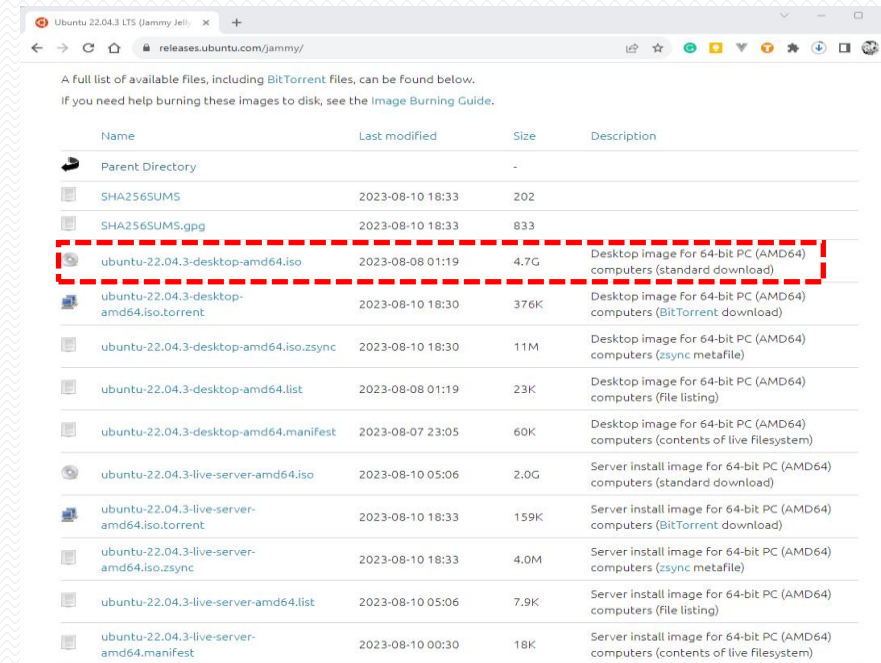
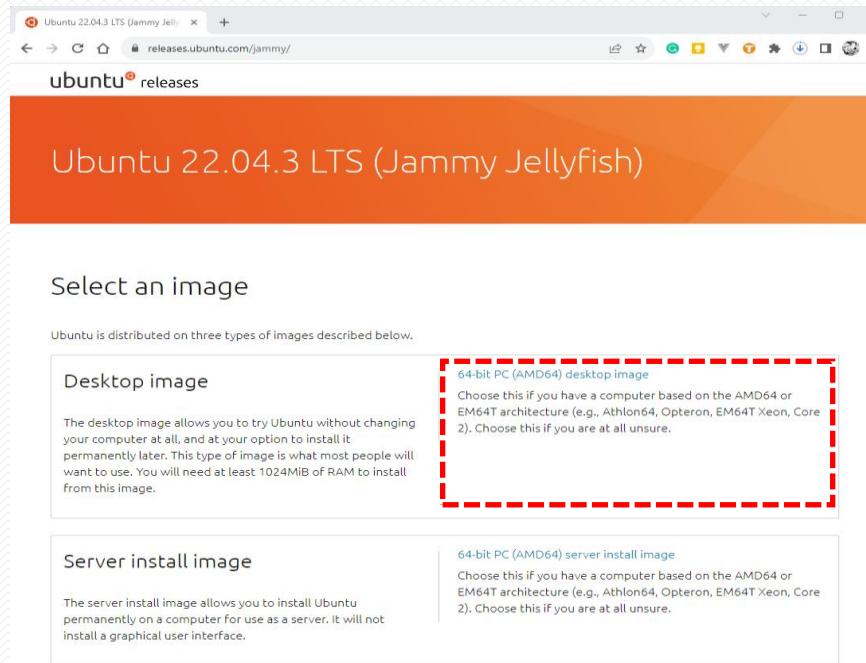
- Open Source
  - A lot of community
  - A lot of people use it
  - We can change any source code for testing
- Support All
  - SoC(x86, ARM, ...), Device Driver, Library, ...
  - Network with high level of security
  - Multi-tasking
- Based on Unix/Linux Kernel
  - Android, iOS, ...



# Make the Booting Disk

# Download the Ubuntu Image

- ISO: International Organization for Standardization
- ISO image: Optical Disc Image (\*.iso)
  - The disk image contains everything that would be written to an optical disc, disk sector by disk sector, including the optical disc file system
- Download Link: <https://releases.ubuntu.com/jammy/>



# Download Flash Tool

- Rufus Tool(Windows)
  - <https://rufus.ie/ko/>
- Download the Rufus and run



## Rufus

간편하게 부팅 가능한 **USB** 드라이브 만들기



Rufus는 USB 메모리 및 플래시 드라이브를 포맷하고 부팅할 수 있도록 만드는 도구입니다.

이 프로그램은 다음 상황에서 유용하게 사용할 수 있습니다:

- 부팅 가능한 ISO 파일(Windows, 리눅스, UEFI 등)을 USB로 설치해야 할 때
- OS가 설치되지 않은 시스템에서 작업해야 할 때
- DOS 환경에서 BIOS나 기타 펌웨어를 설치해야 할 때
- 로우포맷 유틸리티를 실행해야 할 때

Rufus의 크기는 작지만 필요한 모든 것이 들어 있습니다!

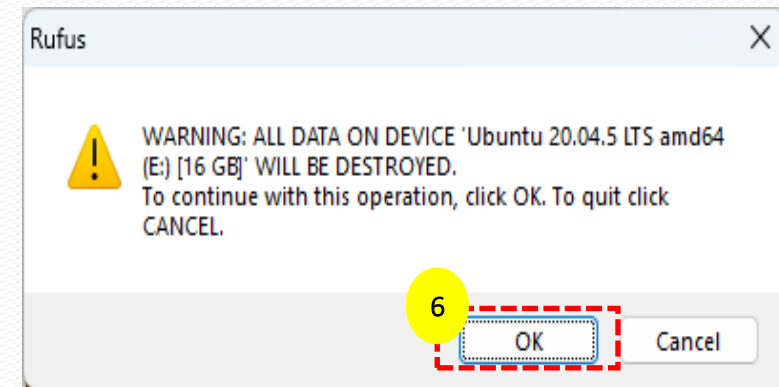
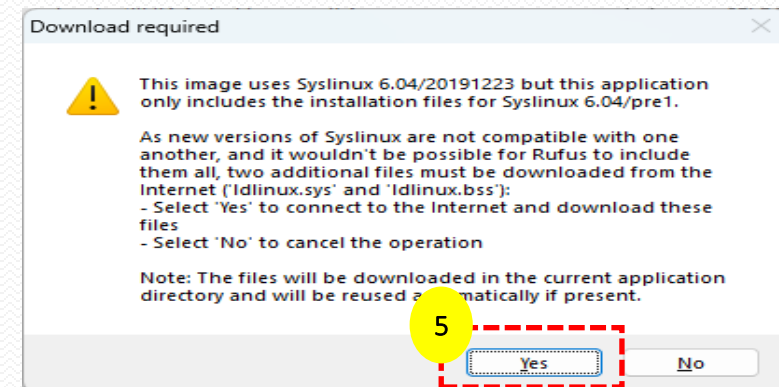
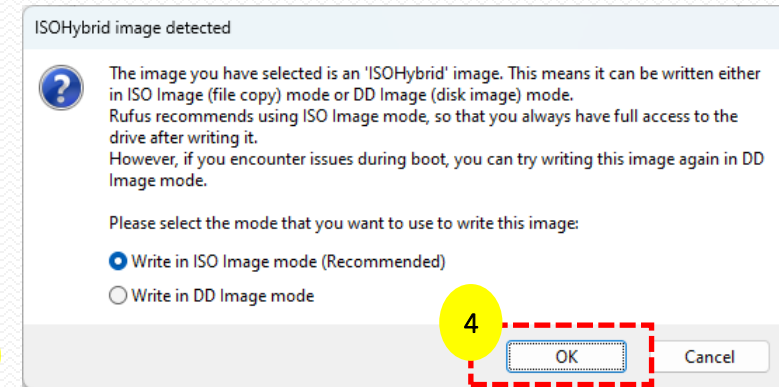
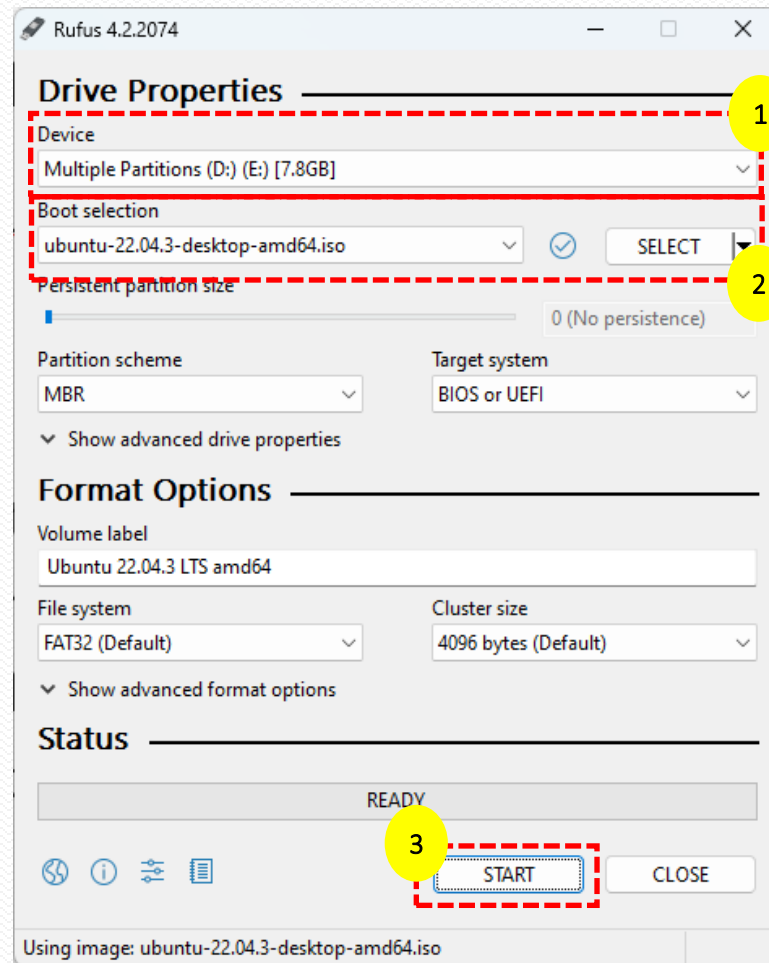
이 페이지 아래에 나열된 ISO 이미지 이외에도 Rufus는 여러 종류의 ISO 이미지를 지원합니다. <sup>(1)</sup>



# Create the Booting Disk(USB)

1. Select the usb device for booting disk
2. Select the iso file
3. Start to create booting disk
4. Select ISO mode
5. Download file
6. USB format

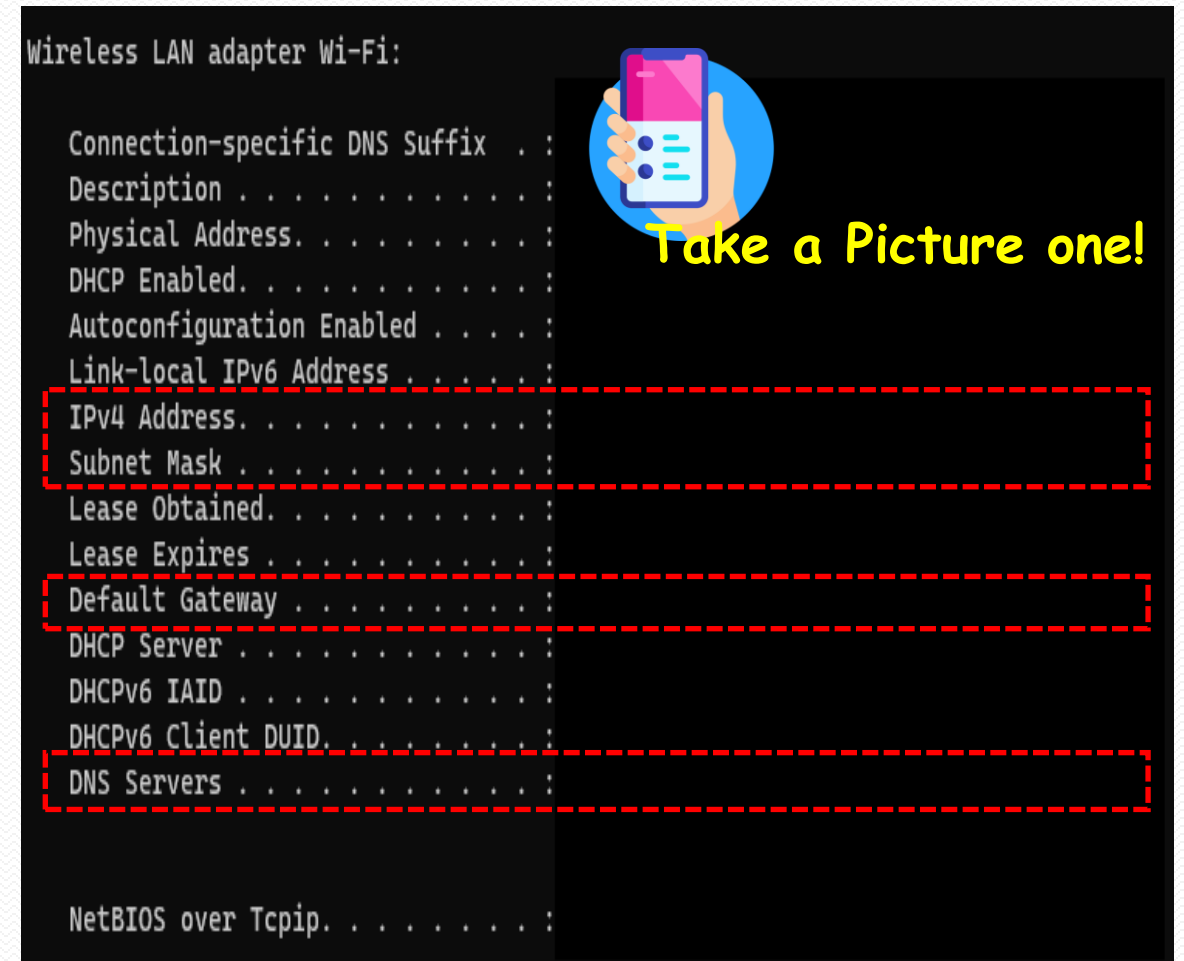
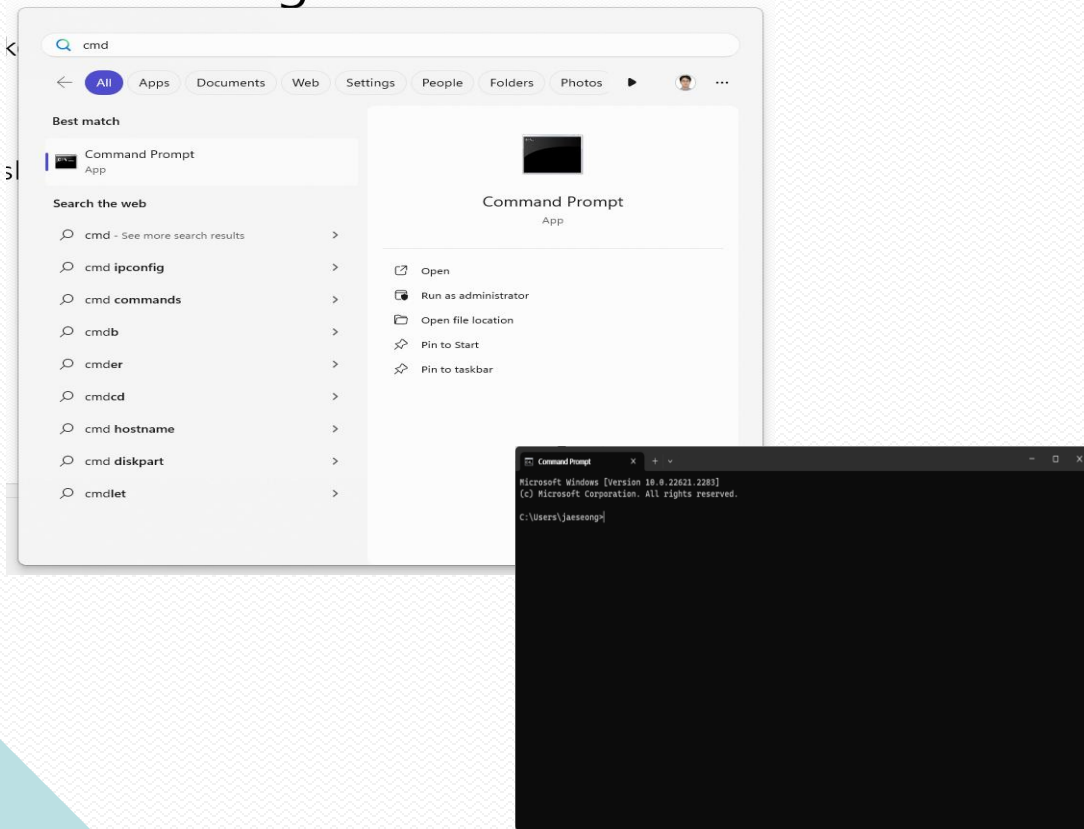
Waiting about the 15 mins,,





# Backup the Network Setting Values

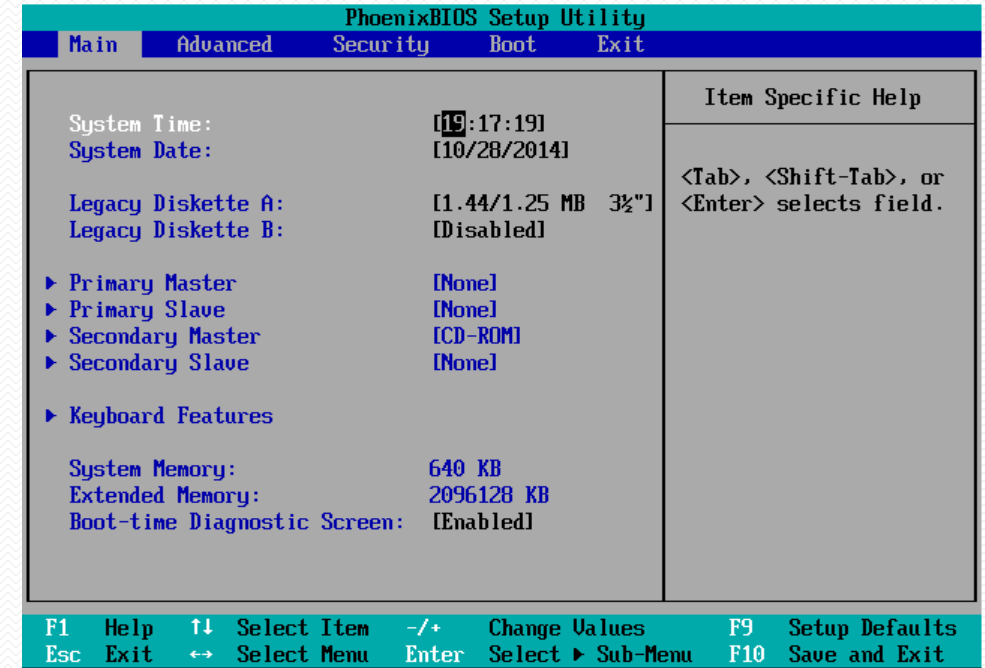
- Input  key -> Input "cmd" -> Input *ipconfig /all*



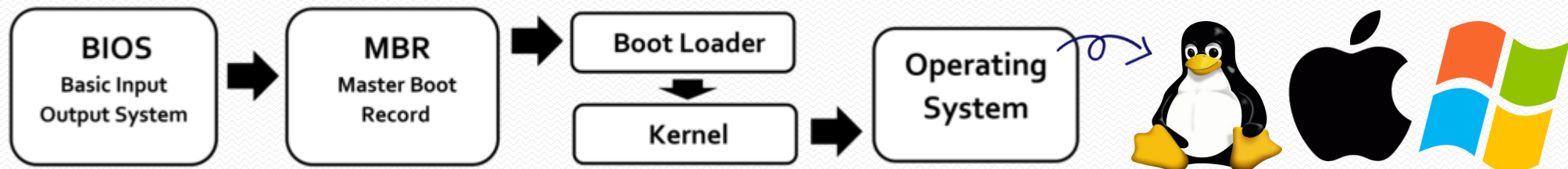
# Settings for the BIOS

# What is the BIOS?

- Basic Input/Output System
- What's BIOS?
  - Firmware used to provide runtime services for OS, programs and to perform hardware initialization during the booting process
- What's Role?
  - PCs initialize and tests the system HW components and loads a boot loader from a mass storage device which then initializes a Kernel



## Legacy Boot

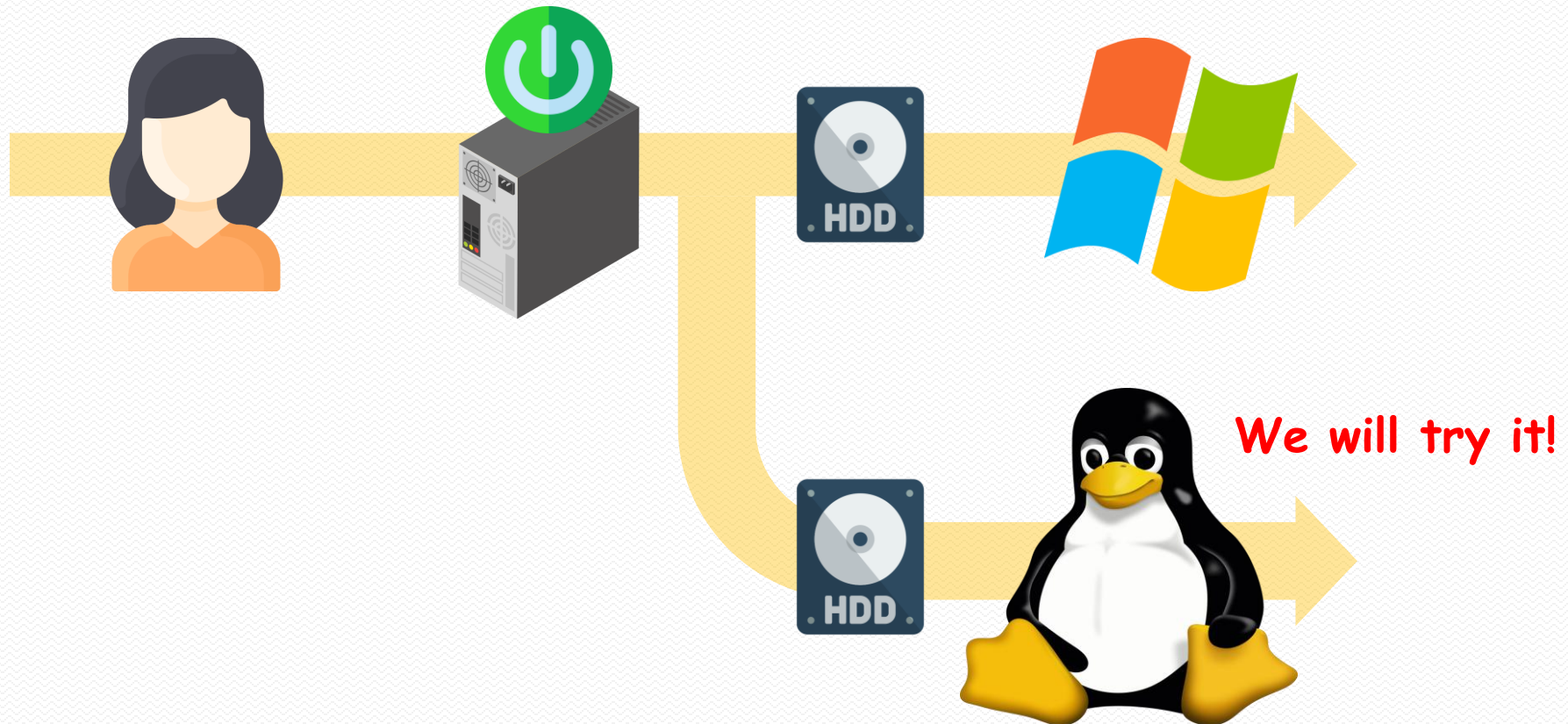


Reference Link

Wiki: <https://en.wikipedia.org/wiki/BIOS>

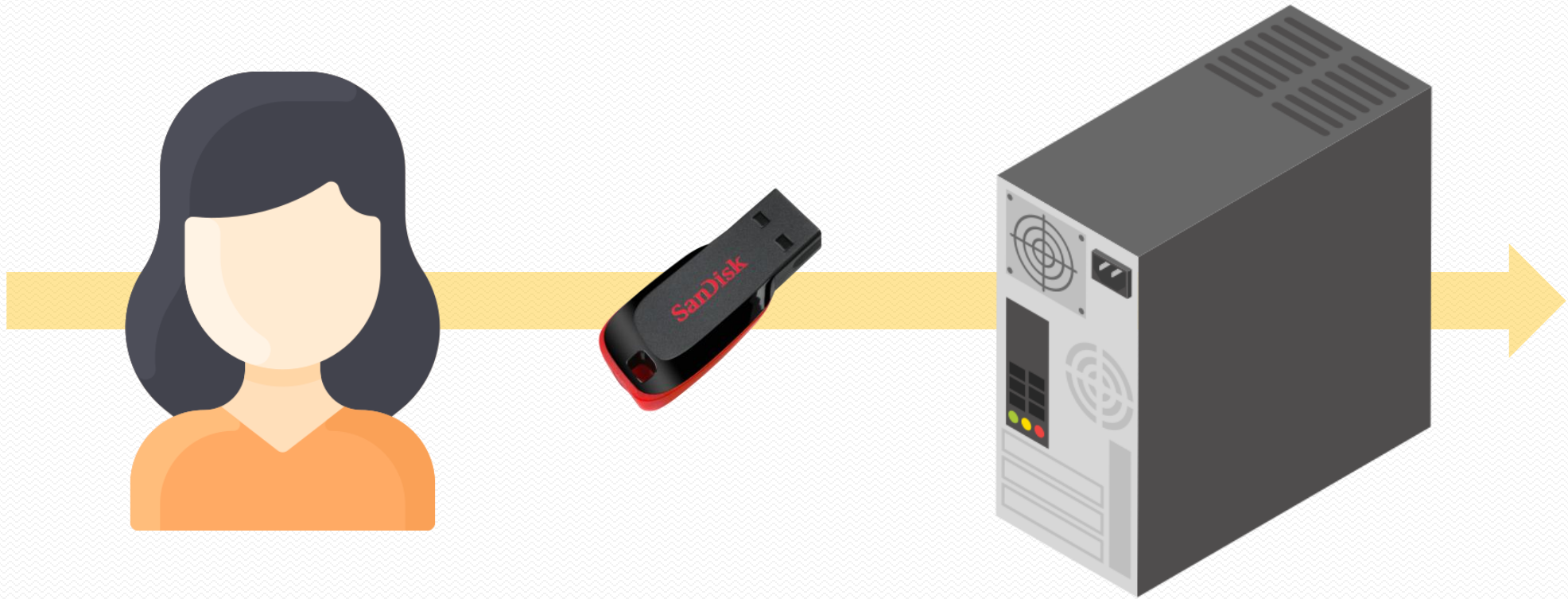
# Why Change the BIOS Configuration?

- Try to Multi-Booting
  - Current, the system installed Windows only
  - We will install the Linux(Ubuntu)



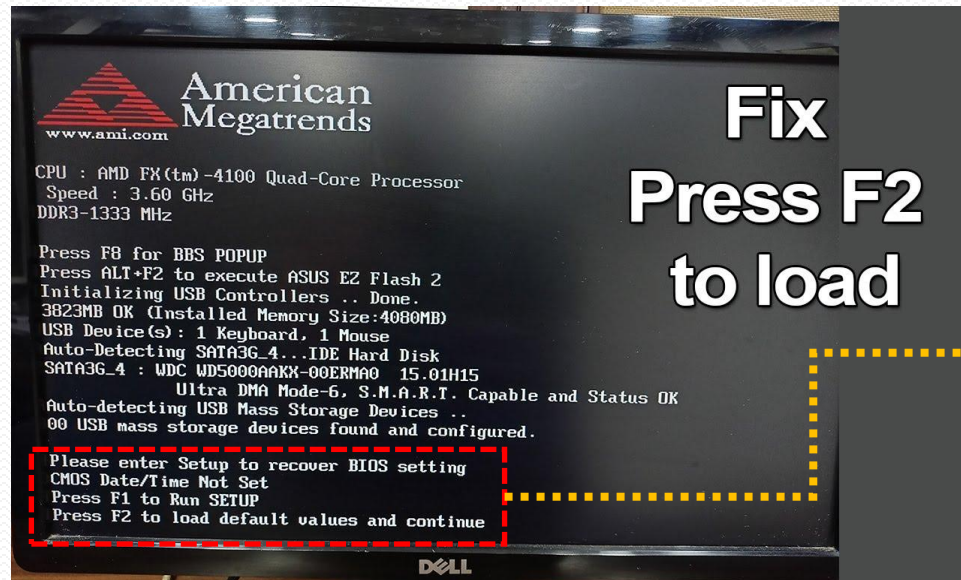
# Plug-In the Booting USB

- First, input the USB stick in your Desktop



# Issue when Entering the BIOS

- When starting the boot, you should input the “key” for entering the BIOS



Simple, but, not a good access method,,

## BIOS Keys by Manufacturer

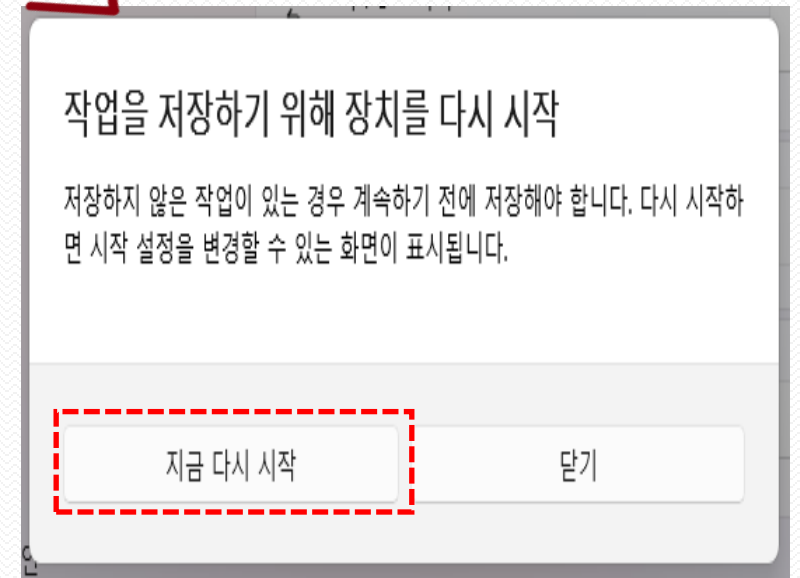
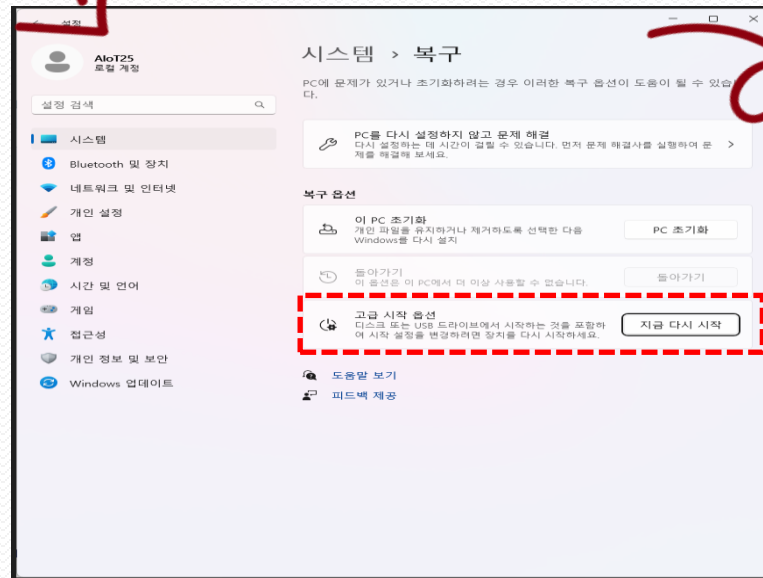
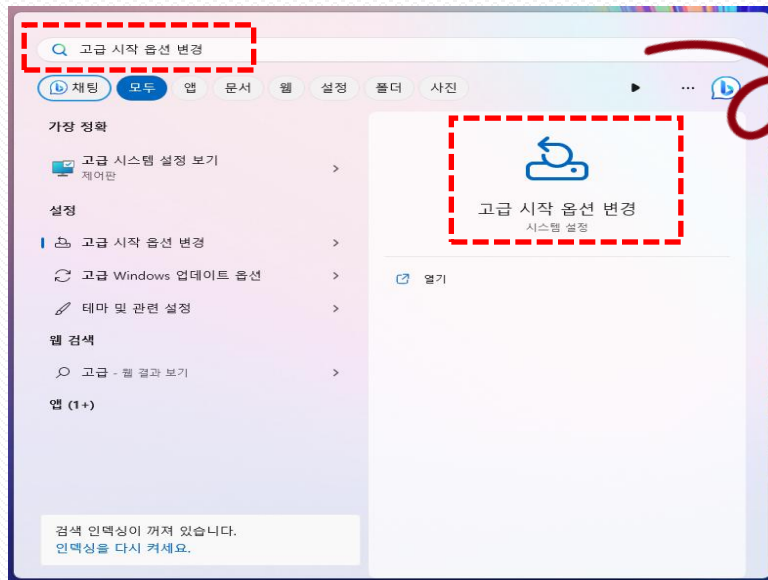
Here's a list of common BIOS keys by brand. Depending on the age of your model, the key may be different.

- ASRock: F2 or DEL
- ASUS: F2 for all PCs, F2 or DEL for Motherboards
- Acer: F2 or DEL
- Dell: F2 or F12
- ECS: DEL
- Gigabyte / Aorus: F2 or DEL
- HP: F10
- Lenovo (Consumer Laptops): F2 or Fn + F2
- Lenovo (Desktops): F1
- Lenovo (ThinkPads): Enter then F1.
- MSI: DEL for motherboards and PCs
- Microsoft Surface Tablets: Press and hold volume up button.
- Origin PC: F2
- Samsung: F2
- Toshiba: F2
- Zotac: DEL



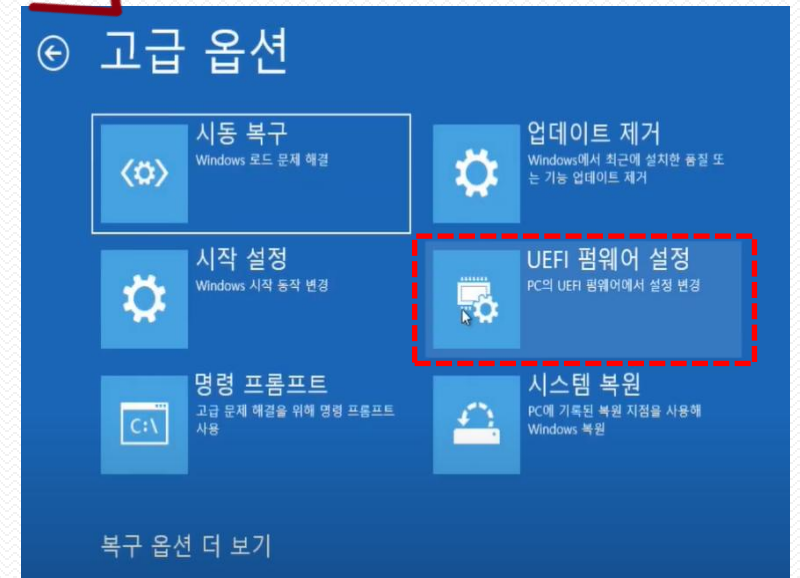
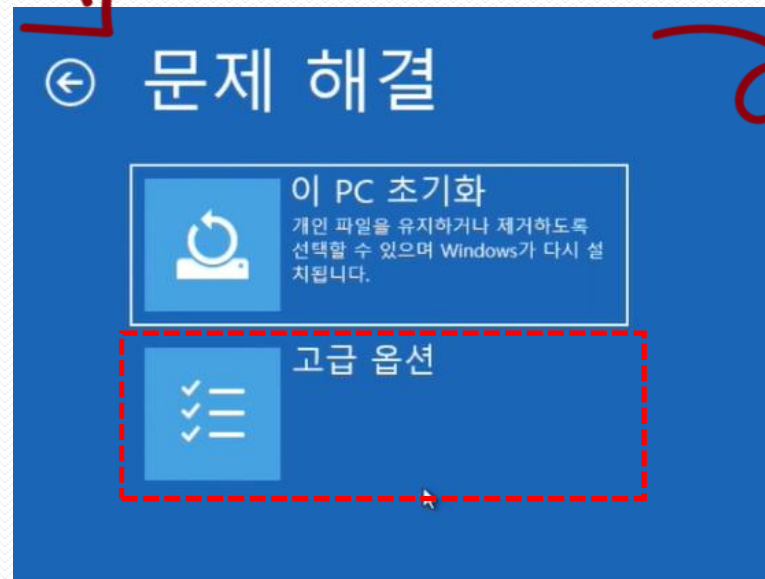
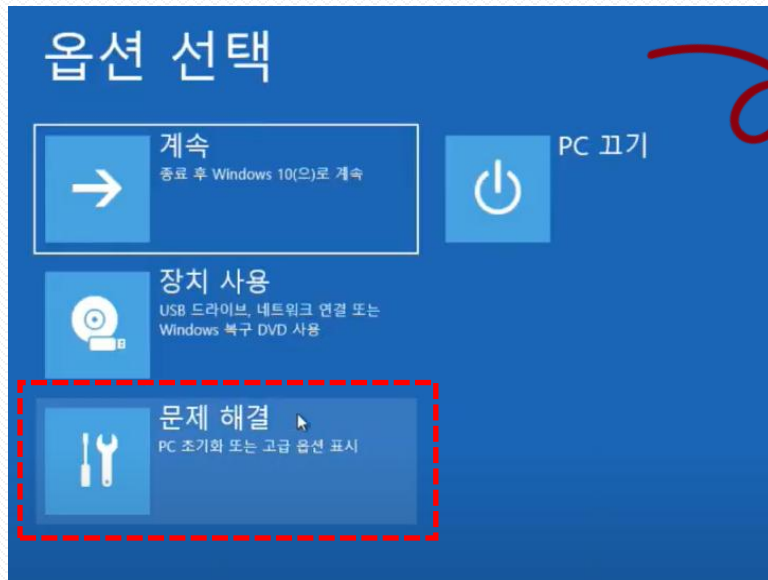
# Try to Enter to the BIOS

- Input  key -> find the “Advanced startup” -> Reboot the system



# Try to Enter to the BIOS (cont,)

- Click “Troubleshoot” -> “Advanced options” -> “UEFI Firmware Settings”



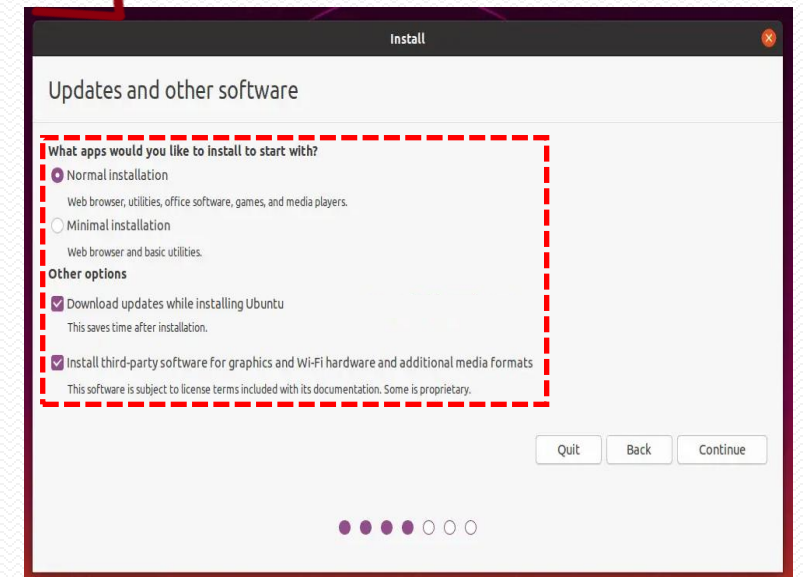
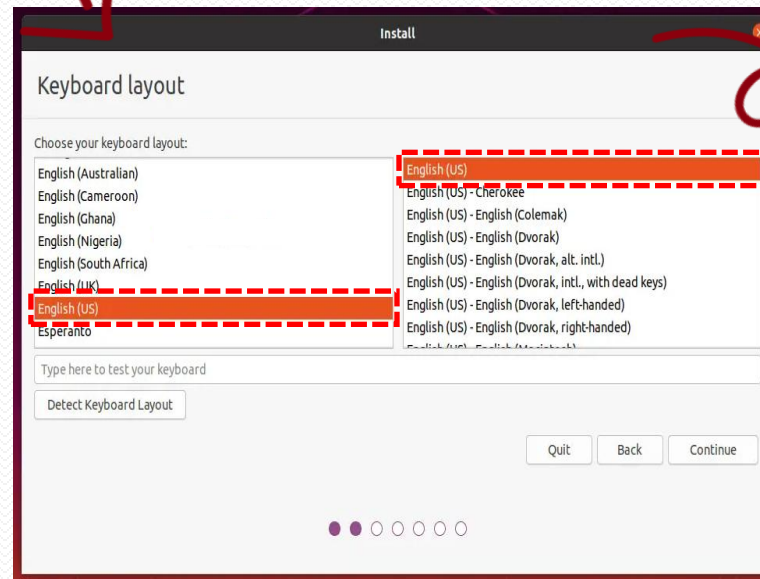
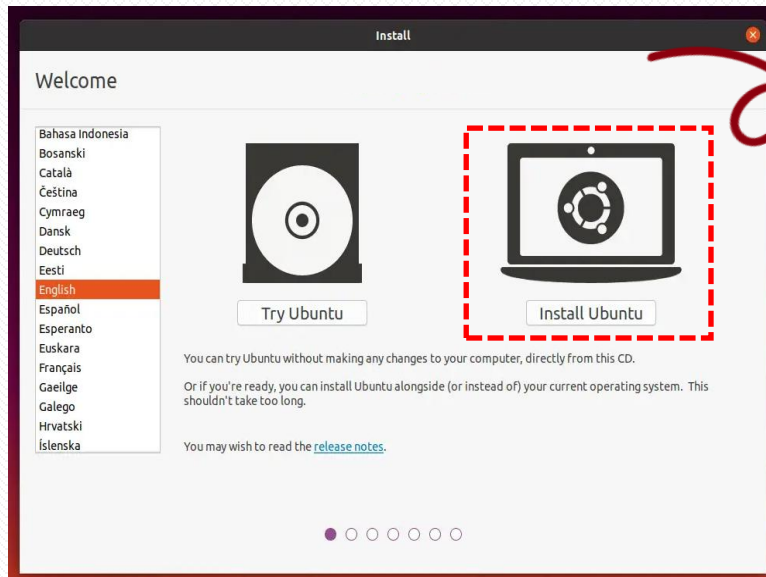
# Try to Enter to the BIOS (cont,)

- You can see the BIOS
- Choose the “*boot*” menu
- Disabled the “*Secure Boot*”
- Change the boot priority (Put “*UEFI: SanDisk*” on top)
- Save and exit (F10 key)

# Install the Ubuntu

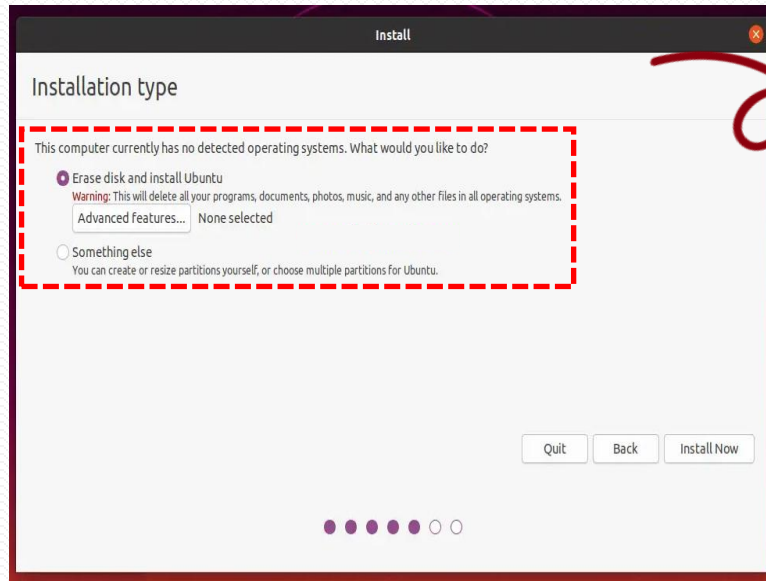
# Install the Ubuntu

- Select the default “English” in Keyboard layout
- “Normal Installation” select as the default value also

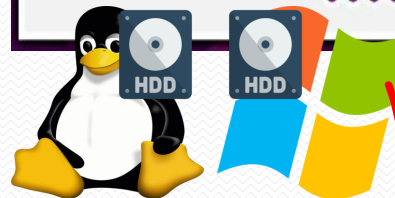
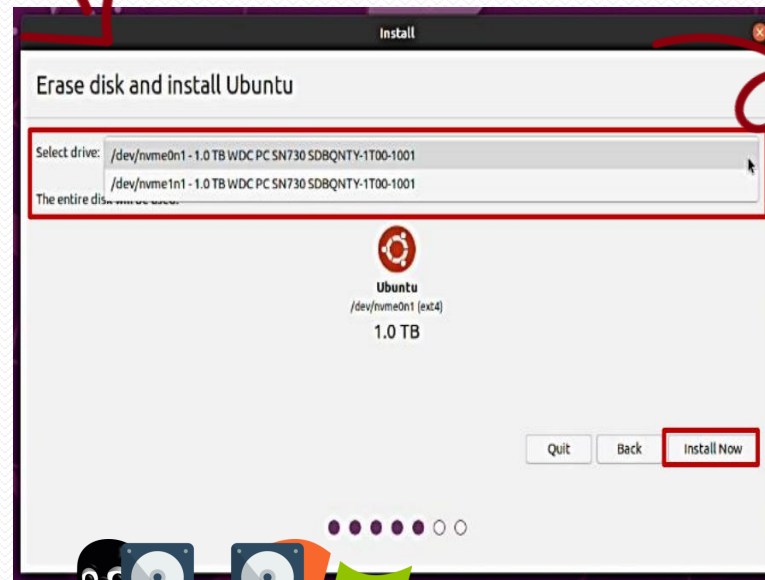


# Install the Ubuntu (cont,)

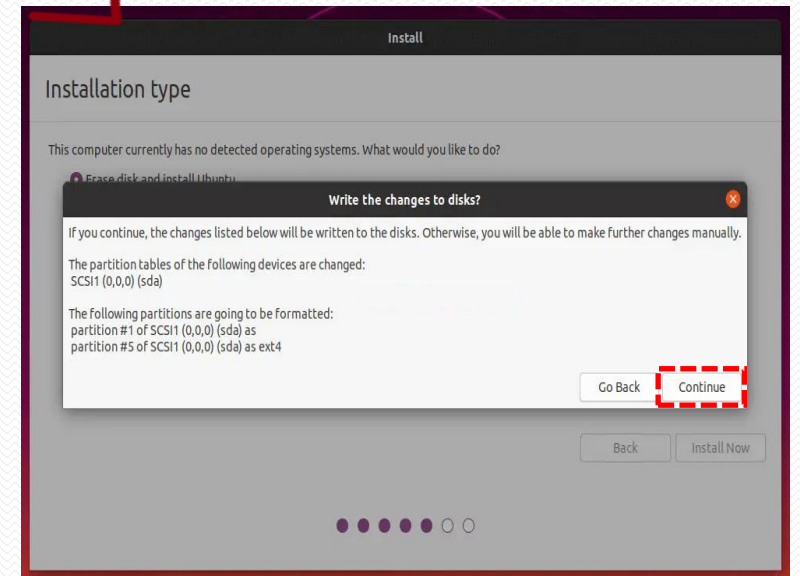
- Select the “Erase disk and install Ubuntu”
- You must check the correct drive that you use for Ubuntu!



**Important!!**



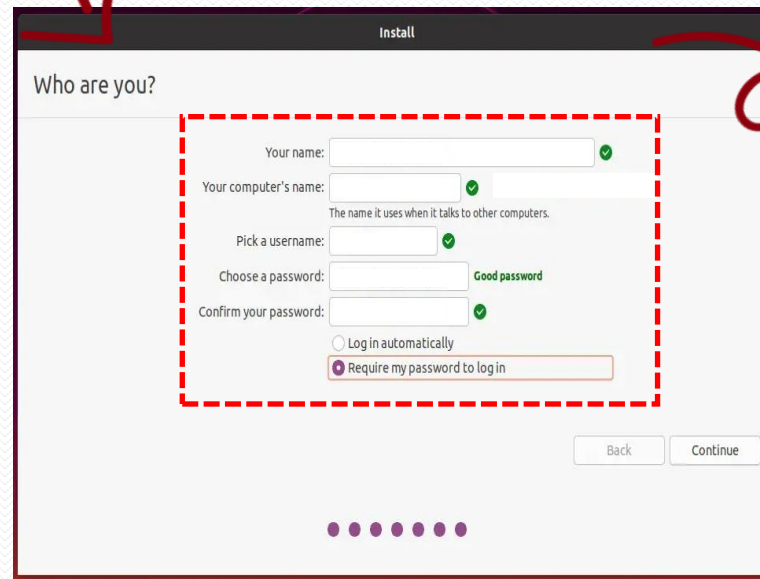
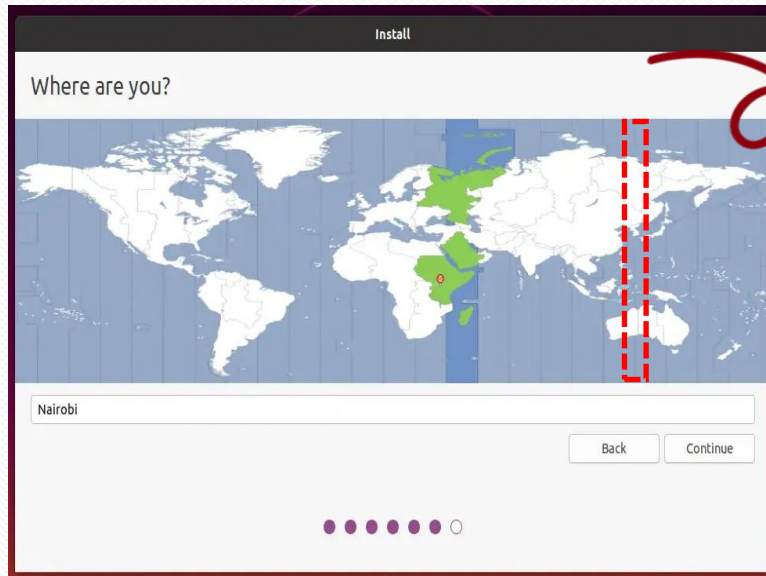
**Which select?**



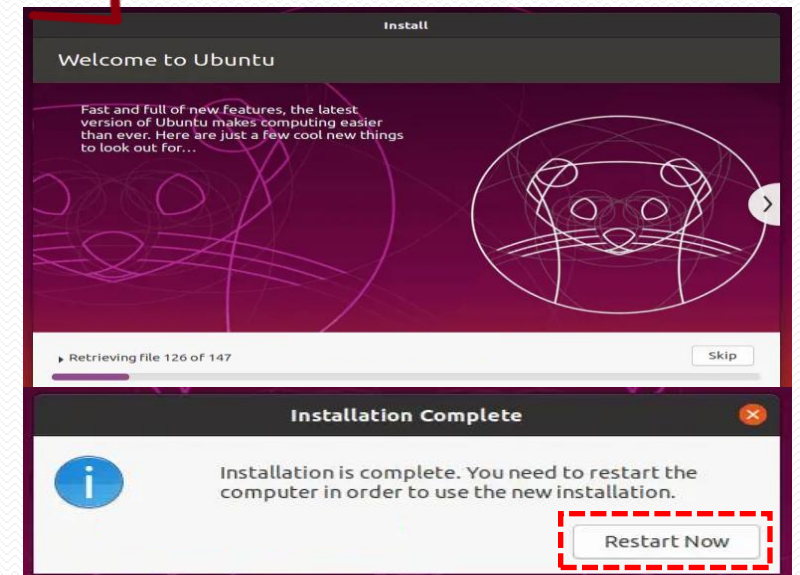


# Install the Ubuntu (cont,)

- Select the area to “Seoul”
- Input the name and password for the login



Waiting about the 5~10 mins,,



# Boot the Ubuntu 22.04

