

# Module 0: Setting up the environment - Getting your machine ready

## Setting Up Your Development Environment (Choose One)

### Install Linux:

- Use the [Ubuntu tutorial](#) to guide you through the installation process

### Use Windows Subsystem for Linux (WSL):

- This allows you to run a Linux environment within Windows.
- Follow the [official Microsoft guide](#) to set up WSL

**Note:** Throughout the labs, commands might differ slightly between pure Linux and WSL. The Linux commands will be provided in the other resources, WSL users might need to put extra efforts to make those commands run on their machines.

## Setting up Productivity Tools

Before you begin, update your system to ensure all existing packages are up to date to avoid any conflicts during the installation.

```
sudo apt update  
sudo apt upgrade
```

### Editor:

- Vim is the default editor
- VS Code Installation: [click here](#)

### Version Control Tool:

- Run this command to see if git is already installed:

```
git --version
```

- Else install [git](#):

```
apt-get install git
```

### GCC Compiler toolchain:

- Run this command to see if git is already installed:

```
gcc --version
```

- Else install [gcc](#):

```
sudo apt install gcc
```

### GDB Debugger:

- Run this command to see if gdb is already installed:

```
gdb
```

- Else install gdb:

```
sudo apt install gdb build-essential gcc
```

### Python:

- Run this command to see if git is already installed:

```
python3 --version
```

- Else install [python3](#):

```
sudo apt install python3 python3-pip ipython3
```

### Make Utility:

- Run this command to see if make is already installed:

```
make --version
```

- Else install [make](#):

```
sudo apt install make
```