

AeroAspire -SDE

Intern Training

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Week5 Day1 Oct21

- **Learning Topics:**
 - Linux Basics
 - Multipass Setup
- **Task:**
 - Install Multipass
 - Launch Ubuntu VM
 - SSH into VM
 - Practice CLI commands (ls, cd, touch, nano, rm, chmod, sudo)
 - Install Python, Git, curl, net-tools
 - Setup simple folder
 - Run Python script inside
- **Questions:**
 - Q: What is the difference between a VM and a container?**
 - A VM is like a full computer running on your system, with its own OS and virtual hardware.
 - Containers are lighter because they share the host computer's OS.
 - Containers are faster and use less space.
 - VMs are heavier and slower since they run a whole OS inside them.

 - Q: How do permissions work in Linux? Explain chmod and chown.**
 - Every file or folder has permissions: who can read, write, or run it.
 - chmod changes these permissions.
 - chown changes the owner of a file or folder.
 - These commands help control who can access or edit files.

 - Q: Why use apt and sudo? What happens when updating packages?**
 - apt is used to install or update software in Linux.
 - sudo lets you run commands as an admin because normal users can't change system files.
 - When updating, apt downloads the latest version of software from the server.
 - It then updates your system files so the software works properly.
 - sudo is needed to make sure you have permission to change protected files.

Q: Write command flow: create project folder → create script → run it → make it executable → delete folder

```
johncode@future:/mnt/c/Users/Dell/Desktop/Progress/AeroAspireInternship-1$ cd Week05
johncode@future:/mnt/c/Users/Dell/Desktop/Progress/AeroAspireInternship-1/Week05$ cd Day1
johncode@future:/mnt/c/Users/Dell/Desktop/Progress/AeroAspireInternship-1/Week05/Day1$ echo 'print("Hello from WSL Ubuntu!")' > hello.py
johncode@future:/mnt/c/Users/Dell/Desktop/Progress/AeroAspireInternship-1/Week05/Day1$ python3 hello.py
Hello from WSL Ubuntu!
johncode@future:/mnt/c/Users/Dell/Desktop/Progress/AeroAspireInternship-1/Week05/Day1$ ls
hello.py
johncode@future:/mnt/c/Users/Dell/Desktop/Progress/AeroAspireInternship-1/Week05/Day1$ ls -la
total 0
drwxrwxrwx 1 johncode johncode 4096 Oct 22 21:35
drwxrwxrwx 1 johncode johncode 4096 Oct 22 20:22
-rwxrwxrwx 1 johncode johncode 32 Oct 22 21:35 hello.py
johncode@future:/mnt/c/Users/Dell/Desktop/Progress/AeroAspireInternship-1/Week05/Day1$ pwd
/mnt/c/Users/Dell/Desktop/Progress/AeroAspireInternship-1/Week05/Day1
johncode@future:/mnt/c/Users/Dell/Desktop/Progress/AeroAspireInternship-1/Week05/Day1$ mkdir w5d1
johncode@future:/mnt/c/Users/Dell/Desktop/Progress/AeroAspireInternship-1/Week05/Day1$ cd w5d1
johncode@future:/mnt/c/Users/Dell/Desktop/Progress/AeroAspireInternship-1/Week05/Day1/w5d1$ touch d1.txt
johncode@future:/mnt/c/Users/Dell/Desktop/Progress/AeroAspireInternship-1/Week05/Day1/w5d1$ nano test.txt
johncode@future:/mnt/c/Users/Dell/Desktop/Progress/AeroAspireInternship-1/Week05/Day1/w5d1$ rm d1.txt
johncode@future:/mnt/c/Users/Dell/Desktop/Progress/AeroAspireInternship-1/Week05/Day1/w5d1$ chmod 755 ../hello.py
```

```
johncode@future:/mnt/c/Users/Dell/Desktop/Progress/AeroAspireInternship-1/Week05/Day1/w5d1$ rm d1.txt
johncode@future:/mnt/c/Users/Dell/Desktop/Progress/AeroAspireInternship-1/Week05/Day1/w5d1$ chmod 755 ../hello.py
```

