**Amazon web services**

1. AWs

2. Git -- Git/GitHub

3. Linux Fundamentals

4. Apache 2 -- web server

5. Docker -containerizations platform

6. New Relic -- monitoring tool

7. sonar Qube

8. HTML, CSS, Java Script

9. AWS - Command Line Interface (CLI)

10.AMI - Amazon Machine Image

**Commands** : (SUDO means Super User [having administrative power to run any command], without SUDO a user gets "Permission Denied")

1.sudo -i or sudo su- (to change user to root)

2.exit (to logout)

3.clear (to clear the terminal)

4.bash (to update or save the session)

5.hostname set-hostname <name> (to change the hostname)

6.whoami (to know the username)

7.ip a (to know the ip address)

8.systemctl status ssh (to know the ssh status)

9.systemctl start ssh (to start the ssh server)

10.systemctl stop ssh

11.systemctl restart ssh

\*If ssh service not found then try the below commands;

**sudo apt-get install openssh-server**

**sudo apt-get install openssh-client**

\*If Ip address is not displaying, then ;

Go to settings->network settings->change NAT to **bridged adapter**

\*To install any Package in the Linux;

**sudo apt-get install <package name>**

(or)

**sudo apt install <package name>**

**\*\*Other Notes:**

**Cloud** : To store large Data

**Types**: Public, Private, Hybrid

**Platforms**: AWS, Google cloud Platform(GCP), Microsoft Azure, International Business Machine (IBM)

**Cloud Services:**

->**IAAS**: Infrastructure As A Service

->**PAAS**: Platform As A Service

->**SAAS**: Software As A Service

**\*\*\*\*\*BASIC REQUIREMENTS\*\*\*\***

->VMWARE / Oracle Virtual Box

->Ubuntu Live Server 22.04 LTS(long term Support)

->Putty SSH client

\*we use ip address to connect Putty to VMWARE

\*for that , use "ip a" command to get your IP address in VMWARE

**Steps to create a normal user to root user in AWS EC2 instance**

1. Launch an instance

2. To work as root use : sudo -i or sudo su-

3. change hostname--> hostnamectl set-hostname <name>

4. use "bash" to update the session

5. Use this path to change settings: vi /etc/ssh/sshd\_config

6. On that file enable-->

permitRootLogin yes

PubKeyAuthentication yes

PasswordAUthentication yes

7. There will be a hidden key, you can enable it using this path:

vi etc/ssh/sshd\_config.d/60-cloudimg-settings.conf

and enable this --> PasswordAuthentication yes

8. bash

9. sytemctl restart ssh

10. passwd

11. New password: XXXX

12. Re-type password: XXXX

13. bash

14. systemctl restart ssh

15. systemctl status ssh

16. login as :root

17. password: XXXX

**To create AWS EC2 instance**

1.Go to AWS account

2.Click on launch instance

3.Give the name of the machine or server.

4.then select the operating system--> ubuntu 22.04 LTS

5. It will take the default image AMI based on the OS

6. Instance Type--> select only "free tier eligible" like t2 micro,t3.micro

7. Key pair-> to access the putty and SSH,

two types of key pairs

-->.ppk : it is a private key but to access the putty, it is access to public server

-->.pem : it is also a private key and it is used to access private

8. Network settings --> VPC(virtual private cloud) it acts as a firewall

In VPC there are two types of subnets i.e., private and public

Public subnet can be accessed by everyone

Private subnet can have a .pem key

9.Storage --> minimum 8GB and maximum 30GB is the free tier

In AWS 750 hours free and 365Days