**UmairSolangi   
Task3  
Operating System Lab**

umair1@umair1:~$ ssh-keygen -t rsa -b 2048

Generating public/private rsa key pair.

Enter file in which to save the key (/home/umair1/.ssh/id\_rsa): /home/umair1/ .ssh

/home/umair1/ .ssh already exists.

Overwrite (y/n)? y

Enter passphrase (empty for no passphrase):

Enter same passphrase again:

Your identification has been saved in /home/umair1/ .ssh

Your public key has been saved in /home/umair1/ .ssh.pub

The key fingerprint is:

SHA256:NIQCk5Z7enRG5enhAqTpXmAtKPafynHAOkRBiYFeu18 umair1@umair1

The key's randomart image is:

+---[RSA 2048]----+

|=+++. oo |

|oo=B. oo . |

|++B.+o \* |

|++++o.o+ o |

| ..Boo. S |

|..oo+ .E |

| o.o.+. |

| o +. |

| o |

+----[SHA256]-----+

umair1@umair1:~$ ssh-copy-id hamza1@4.240.109.108

/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/home/umair1/.ssh/id\_rsa.pub"

/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are already installed

/usr/bin/ssh-copy-id: WARNING: All keys were skipped because they already exist on the remote system.

(if you think this is a mistake, you may want to use -f option)

umair1@umair1:~$ ssh-copy-id -f hamza1@4.240.109.108

/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/home/umair1/.ssh/id\_rsa.pub"

Number of key(s) added: 1

Now try logging into the machine, with: "ssh 'hamza1@4.240.109.108'"

and check to make sure that only the key(s) you wanted were added.

umair1@umair1:~$ ssh hamza1@4.240.109.108

Welcome to Ubuntu 20.04.6 LTS (GNU/Linux 5.15.0-1053-azure x86\_64)

\* Documentation: https://help.ubuntu.com

\* Management: https://landscape.canonical.com

\* Support: https://ubuntu.com/advantage

System information as of Fri Dec 15 13:52:38 UTC 2023

System load: 0.0 Processes: 134

Usage of /: 7.8% of 28.89GB Users logged in: 1

Memory usage: 5% IPv4 address for eth0: 10.1.0.4

Swap usage: 0%

\* Strictly confined Kubernetes makes edge and IoT secure. Learn how MicroK8s

just raised the bar for easy, resilient and secure K8s cluster deployment.

https://ubuntu.com/engage/secure-kubernetes-at-the-edge

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.

See https://ubuntu.com/esm or run: sudo pro status

New release '22.04.3 LTS' available.

Run 'do-release-upgrade' to upgrade to it.

Last login: Fri Dec 15 13:40:26 2023 from 202.141.247.86

hamza1@hamza1:~$ ssh-keygen -t rsa -b 2048 -f ~/.ssh/id\_rsa\_second

Generating public/private rsa key pair.

Enter passphrase (empty for no passphrase):

Enter same passphrase again:

Your identification has been saved in /home/hamza1/.ssh/id\_rsa\_second

Your public key has been saved in /home/hamza1/.ssh/id\_rsa\_second.pub

The key fingerprint is:

SHA256:iqhXWCmLKW2U8FMD4FXE9DsyD65NfrkHzTi+I00vkuY hamza1@hamza1

The key's randomart image is:

+---[RSA 2048]----+

|...o=+ |

|o . o.. |

| + o o . |

| \* o . |

| = \* + oS |

|+ =.o.=\*.o |

|.....o\*.= |

| .. == B o |

|.. .oE+o\* |

+----[SHA256]-----+

hamza1@hamza1:~$ ssh-copy-id -i ~/.ssh/id\_rsa\_second umair@98.70.57.10

/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/home/hamza1/.ssh/id\_rsa\_second.pub"

/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are already installed

/usr/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it is to install the new keys

umair@98.70.57.10's password:

das

Permission denied, please try again.

umair@98.70.57.10's password:

Permission denied, please try again.

umair@98.70.57.10's password:

umair@98.70.57.10: Permission denied (publickey,password).

hamza1@hamza1:~$ ssh-copy-id -i ~/.ssh/id\_rsa\_second umair1@98.70.57.10

/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/home/hamza1/.ssh/id\_rsa\_second.pub"

/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are already installed

/usr/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it is to install the new keys

umair1@98.70.57.10's password:

Number of key(s) added: 1

Now try logging into the machine, with: "ssh 'umair1@98.70.57.10'"

and check to make sure that only the key(s) you wanted were added.

hamza1@hamza1:~$ ssh -i ~/.ssh/id\_rsa\_second umair1@98.70.57.10

Welcome to Ubuntu 20.04.6 LTS (GNU/Linux 5.15.0-1053-azure x86\_64)

\* Documentation: https://help.ubuntu.com

\* Management: https://landscape.canonical.com

\* Support: https://ubuntu.com/advantage

System information as of Fri Dec 15 13:54:43 UTC 2023

System load: 0.0 Processes: 136

Usage of /: 7.7% of 28.89GB Users logged in: 1

Memory usage: 5% IPv4 address for eth0: 10.0.0.4

Swap usage: 0%

\* Strictly confined Kubernetes makes edge and IoT secure. Learn how MicroK8s

just raised the bar for easy, resilient and secure K8s cluster deployment.

https://ubuntu.com/engage/secure-kubernetes-at-the-edge

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.

See https://ubuntu.com/esm or run: sudo pro status

New release '22.04.3 LTS' available.

Run 'do-release-upgrade' to upgrade to it.

Last login: Fri Dec 15 13:22:23 2023 from 202.141.247.86