**(a)**

**Shell Scriptings in a row:**

pwd

touch 20301125\_1.txt 20301125\_2.txt 20301125\_3.txt 20301125\_4.txt && mkdir Mustakim1 Mustakim2

mv 20301125\_1.txt 20301125\_2.txt 20301125\_3.txt Mustakim1/

cp Mustakim1/20301125\_1.txt Mustakim1/20301125\_2.txt Mustakim2/

mkdir Mustakim3

cp -r Mustakim1 Mustakim3/

chmod o+x Mustakim3/

cd Mustakim3/

ls -l

chmod -R 500 \*

chmod -R go=rx \*

ls -l

cd Mustakim3/Mustakim1

ls -l

cd ..

cd ..

ls -l

sudo mv Mustakim3/ /

ls

rm -r \*

ls

**Terminal Operations:**

**mustakim@DESKTOP-Q2KTU5Q:~$** pwd

/home/mustakim

**mustakim@DESKTOP-Q2KTU5Q:~$** touch 20301125\_1.txt 20301125\_2.txt 20301125\_3.txt 20301125\_4.txt && mkdir Mustakim1 Mustakim2

**mustakim@DESKTOP-Q2KTU5Q:~$** ls

20301125\_1.txt 20301125\_2.txt 20301125\_3.txt 20301125\_4.txt Mustakim1 Mustakim2

**mustakim@DESKTOP-Q2KTU5Q:~$** mv 20301125\_1.txt 20301125\_2.txt 20301125\_3.txt Mustakim1/

**mustakim@DESKTOP-Q2KTU5Q:~$** cp Mustakim1/20301125\_1.txt Mustakim1/20301125\_2.txt Mustakim2/

**mustakim@DESKTOP-Q2KTU5Q:~$** mkdir Mustakim3

**mustakim@DESKTOP-Q2KTU5Q:~$** cp -r Mustakim1 Mustakim3/

**mustakim@DESKTOP-Q2KTU5Q:~$** chmod o+x Mustakim3/

**mustakim@DESKTOP-Q2KTU5Q:~$** cd Mustakim3/

mustakim@DESKTOP-Q2KTU5Q:~/Mustakim3$ ls -l

total 0

drwxr-xr-x 1 mustakim mustakim 512 Oct 30 20:42 Mustakim1

**mustakim@DESKTOP-Q2KTU5Q:~/Mustakim3$** chmod -R 500 \*

**mustakim@DESKTOP-Q2KTU5Q:~/Mustakim3$** ls -l

total 0

dr-x------ 1 mustakim mustakim 512 Oct 30 20:42 Mustakim1

**mustakim@DESKTOP-Q2KTU5Q:~/Mustakim3$** chmod -R go=rx \*

**mustakim@DESKTOP-Q2KTU5Q:~/Mustakim3$** ls -l

total 0

dr-xr-xr-x 1 mustakim mustakim 512 Oct 30 20:42 Mustakim1

**mustakim@DESKTOP-Q2KTU5Q:~$** cd Mustakim3/Mustakim1

**mustakim@DESKTOP-Q2KTU5Q:~/Mustakim3/Mustakim1$** ls -l

total 0

-r-xr-xr-x 1 mustakim mustakim 0 Oct 30 20:42 20301125\_1.txt

-r-xr-xr-x 1 mustakim mustakim 0 Oct 30 20:42 20301125\_2.txt

-r-xr-xr-x 1 mustakim mustakim 0 Oct 30 20:42 20301125\_3.txt

**mustakim@DESKTOP-Q2KTU5Q:~/Mustakim3$** cd ..

**mustakim@DESKTOP-Q2KTU5Q:~$** ls -l

total 0

-rw-r--r-- 1 mustakim mustakim 0 Oct 30 20:39 20301125\_4.txt

drwxr-xr-x 1 mustakim mustakim 512 Oct 30 20:40 Mustakim1

drwxr-xr-x 1 mustakim mustakim 512 Oct 30 20:41 Mustakim2

drwxr-xr-x 1 mustakim mustakim 512 Oct 30 20:42 Mustakim3

**mustakim@DESKTOP-Q2KTU5Q:~$** ls -l

total 0

-rw-r--r-- 1 mustakim mustakim 0 Oct 30 20:39 20301125\_4.txt

drwxr-xr-x 1 mustakim mustakim 512 Oct 30 20:40 Mustakim1

drwxr-xr-x 1 mustakim mustakim 512 Oct 30 20:41 Mustakim2

drwxr-xr-x 1 mustakim mustakim 512 Oct 30 20:42 Mustakim3

**mustakim@DESKTOP-Q2KTU5Q:~$** sudo mv Mustakim3/ /

[sudo] password for mustakim:

**mustakim@DESKTOP-Q2KTU5Q:~$**

**mustakim@DESKTOP-Q2KTU5Q:~$** ls

20301125\_4.txt Mustakim1 Mustakim2

**mustakim@DESKTOP-Q2KTU5Q:~$** rm -r \*

**mustakim@DESKTOP-Q2KTU5Q:~$** ls

**mustakim@DESKTOP-Q2KTU5Q:~$**

**(b)**

**Shell Scripting**

touch courses.txt

cat>courses.txt

CSE321 Operating System 1

CSE341 Microprocessor 1

CSE470 Software Engineering 3

^C

grep -c "CSE" courses.txt

**Terminal Operations:**

**mustakim@DESKTOP-Q2KTU5Q:~$** touch courses.txt

**mustakim@DESKTOP-Q2KTU5Q:~$** cat>courses.txt

CSE321 Operating System 1

CSE341 Microprocessor 1

CSE470 Software Engineering 3

^C

**mustakim@DESKTOP-Q2KTU5Q:~$** grep -c "CSE" courses.txt

3

**mustakim@DESKTOP-Q2KTU5Q:~$**

**(c)**

**mustakim@DESKTOP-Q2KTU5Q:~$** ls -a /

. Mustakim3 boot etc init lib32 libx32 mnt proc run snap sys usr

.. bin dev home lib lib64 media opt root sbin srv tmp var

**(d)**

**Shell Scripting:**

touch sonnets.txt

cat>sonnets.txt

sed -n '5,17p' sonnets.txt

**Terminal Operations:**

**mustakim@DESKTOP-Q2KTU5Q:~$** touch sonnets.txt

**mustakim@DESKTOP-Q2KTU5Q:~$** cat>sonnets.txt

From fairest creatures we desire increase,

That thereby beauty’s rose might never die,

But as the riper should by time decrease,

His tender heir mught bear his memeory:

But thou, contracted to thine own bright eyes,

Feed’st thy light’st flame with self-substantial fuel,

Making a famine where abundance lies,

Thyself thy foe, to thy sweet self too cruel.

Thou that art now the world’s fresh ornament

And only herald to the gaudy spring,

Within thine own bud buriest thy content

And, tender churl, makest waste in niggarding.

Pity the world, or else this glutton be,

To eat the world’s due, by the grave and thee.

When forty winters shall besiege thy brow,

And dig deep trenches in thy beauty’s field,

Thy youth’s proud livery, so gazed on now,

Will be a tatter’d weed, of small worth held:

Then being ask’d where all thy beauty lies,

Where all the treasure of thy lusty days,

To say, within thine own deep-sunken eyes,

Were an all-eating shame and thriftless praise.

How much more praise deserved thy beauty’s use,

If thou couldst answer ‘This fair child of mine

Shall sum my count and make my old excuse,’

Proving his beauty by succession thine!

This were to be new made when thou art old,

And see thy blood warm when thou feel’st it cold.

^C

**mustakim@DESKTOP-Q2KTU5Q:~$** sed -n '5,17p' sonnets.txt

But thou, contracted to thine own bright eyes,

Feed’st thy light’st flame with self-substantial fuel,

Making a famine where abundance lies,

Thyself thy foe, to thy sweet self too cruel.

Thou that art now the world’s fresh ornament

And only herald to the gaudy spring,

Within thine own bud buriest thy content

And, tender churl, makest waste in niggarding.

Pity the world, or else this glutton be,

To eat the world’s due, by the grave and thee.

When forty winters shall besiege thy brow,

And dig deep trenches in thy beauty’s field,

Thy youth’s proud livery, so gazed on now,