

**Q1. A) Write and execute the following Commands on Linux**

- i) Create a directory FYBCA under that create a file student.txt.

```
mkdir FYBCA
```

```
Cd FYBCA
```

```
Cat > student.txt
```

- ii) Display all files along with their size  
`ls -l`.

- iii) Count the number of files in current working directory.

```
ls -l | wc -l
```

- iv) Create the following text file a.txt and write commands based on it

```
This is line 1 UNIX UNIX
```

```
This is line 2 unix
```

```
This is line 3 Unix Unix
```

```
This is line 4 hello
```

Write a linux command to display count of lines that search pattern "unix"

```
cat > a.txt
```

```
grep -c 'unix' a.txt
```

- v) Write Vi command to copy first three lines and paste after sixth line.

```
3yy
```

```
p
```

**Q1. B) Write a shell script to evaluate basic arithmetic operations.**

```
#!/bin/bash
```

```
echo "Enter the first number:"
```

```
read a
```

```
echo "Enter the second number:"
```

```
read b
```

```
echo "Addition: $(expr $a + $b)"
```

```
echo "Subtraction: $(expr $a - $b)"
```

```
echo "Multiplication: $(expr $a \* $b)"
```

```
echo "Division: $(expr $a / $b)"
```

**Q2. Write a shell script to check whether two numbers are same or different.**

```
#!/bin/bash
```

```
echo "Enter a:"
```

```
read a
```

```
echo "Enter b:"
```

```
read b
```

```
if [ $a -eq $b ]; then
```

```
    echo "a is equal to b"
```

```
else
```

```
    echo "a is not equal to b"
```

```
fi
```

**OR**

**Q2. Write a shell script to find divisors of number**

```
#!/bin/bash
```

```
echo "Enter number:"
```

```
read number
```

```
echo "Divisors of $number:"
```

```
for ((i=1; i<=$number; i++)); do
```

```
    if [ $((number%i)) -eq 0 ]; then
```

```
        echo $i
```

```
    fi
```

```
done
```