

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

- i) Create a subdirectory in the directory created.
`mkdir subdirectory`
- ii) Accept the file and display that file along with line numbers.
`cat -n filename`

- iii) Assume the below contents of file1.txt

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Tuhina
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Sort the above file in alphabetical order.

`sort file1.txt`

- iv) Create file as follows and write commands for same.

`$ cat file.txt`
`unix or linux os`
`is unix good os`
`is linux good os`

Create a file and display field from first to fourth of each line from the file.

`echo "unix or linux os" > file.txt`
`echo "is unix good os" >> file.txt`
`echo "is linux good os" >> file.txt`
`awk '{print $1, $2, $3, $4}' file.txt`

- v) Type the following sentences:
Welcome to BCA science department.
This is FYBCA class.
The class strength is 80.
Now delete first 2 lines from this sentences using vi command

Q1. B) Write a shell script to display file in reverse order.

```
#!/bin/bash

if [ $# -ne 1 ]; then
    echo "Usage: $0 <filename>"
    exit 1
fi

tac "$1"
```

Q2. Write a shell script to check whether given number is odd or even.

```
#!/bin/bash

echo "Enter a number:"
read number

if [ $((number % 2)) -eq 0 ]; then
    echo "$number is even."
else
    echo "$number is odd."
fi
```

Or

Q2. Write a shell script to find sum of digits.

```
#!/bin/bash

echo "enter num"
read num

sum=0

while [ $num -gt 0 ]
do
    digit=$((num%10))
    echo "$digit"
    sum=$((sum+digit))
    num=$((num/10))
done

echo "sum of digit:$sum"
```