

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

- i) Display last 5 lines of a.txt
`tail -n 5 a.txt`
- ii) Display last modification time for particular file.
`stat -c "%y" filename`
- iii) Create any text file and count number of bytes, words and lines.
`echo "This is a sample text file." > myfile.txt`
`wc myfile.txt`
- i) Create two file having name as state.txt and capital.txt. Each file contain 3 names of the Indian states and capitals respectively. Write a linux command to merge the files in sequentially manner.
`paste state.txt capital.txt`
- iv) Write a vi command to undo the last command.
`u`

Q1.B) Write a shell script to find size of given file

```
#!/bin/bash

echo "Enter the filename:"
read filename

if [ -f "$filename" ]; then
    size=$(stat -c "%s" "$filename")
    echo "Size of '$filename': $size bytes"
else
    echo "Error: File '$filename' not found."
fi
```

Q2. Write a shell script to check whether given number is Palindrome or not.

```
#!/bin/bash

echo -n "Enter a number: "
read num
original_num=$num
rev=0

while [ $num -gt 0 ]; do
    remainder=$(( $num % 10 ))
    rev=$(( $rev * 10 + $remainder ))
    num=$(( $num / 10 ))
done

if [ $original_num -eq $rev ]; then
    echo "$original_num is a palindrome."
else
    echo "$original_num is not a palindrome."
Fi
```

Or

Q2. Write a shell script to print multiplication table using command line arguments

```
#!/bin/bash

number=$1
echo "Multiplication table for $number:"

for (( i=1; i<=10; i++ )); do
    echo "$number x $i = $((number * i))"
done
```