

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

- i) Display calendar of month April 2020.
`cal april 2020`
- ii) Create a file one.txt which contains id, name, designation, Address using Linux command.
`Cat > one.txt`
`Id 123`
`Name abc`
`Designation software engineer`
`Address pune`
- iii) Create any text file and count number of bytes, words and lines in file.
`cat > a.txt`
`wc -c a.txt`
`wc -w a.txt`
`wc -l a.txt`
- iv) Create file as follows and write commands for same.
Linux
Unix
Solaris
HPUX
AIX
Write a linux command to join all lines separated by tab.
`cat > a.txt`
`Paste -s a.txt`
- v) Write Vi command to delete first n lines.
`1,nd`

Q1. B) Write a shell script to calculate simple interest.

```
#!/bin/bash
echo "Enter principle:"
read P
echo "Enter time:"
read T
echo "Enter rate:"
read R
SI=$(( (P * T * R) / 100 ))
echo "Simple Interest: $SI"
```

Q2. Write a shell script to accept two numbers check which is greater.

```
#!/bin/bash

echo "Enter the first number:"
read num1
echo "Enter the second number:"
read num2

if [ $num1 -gt $num2 ]; then
    echo "$num1 is greater than $num2"
elif [ $num1 -lt $num2 ]; then
    echo "$num2 is greater than $num1"
else
    echo "Both numbers are equal"
fi
```

OR

Q2. Write a shell script to find 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
```

```
#!/bin/bash
read -p "Enter a number: " num
reverse=$(echo "$num" | rev)
if [ "$num" = "$reverse" ]; then
    echo "$num is a palindrome."
else
    echo "$num is not a palindrome."
fi
```