

EmbedUR - Linux Training Program

Module - 5

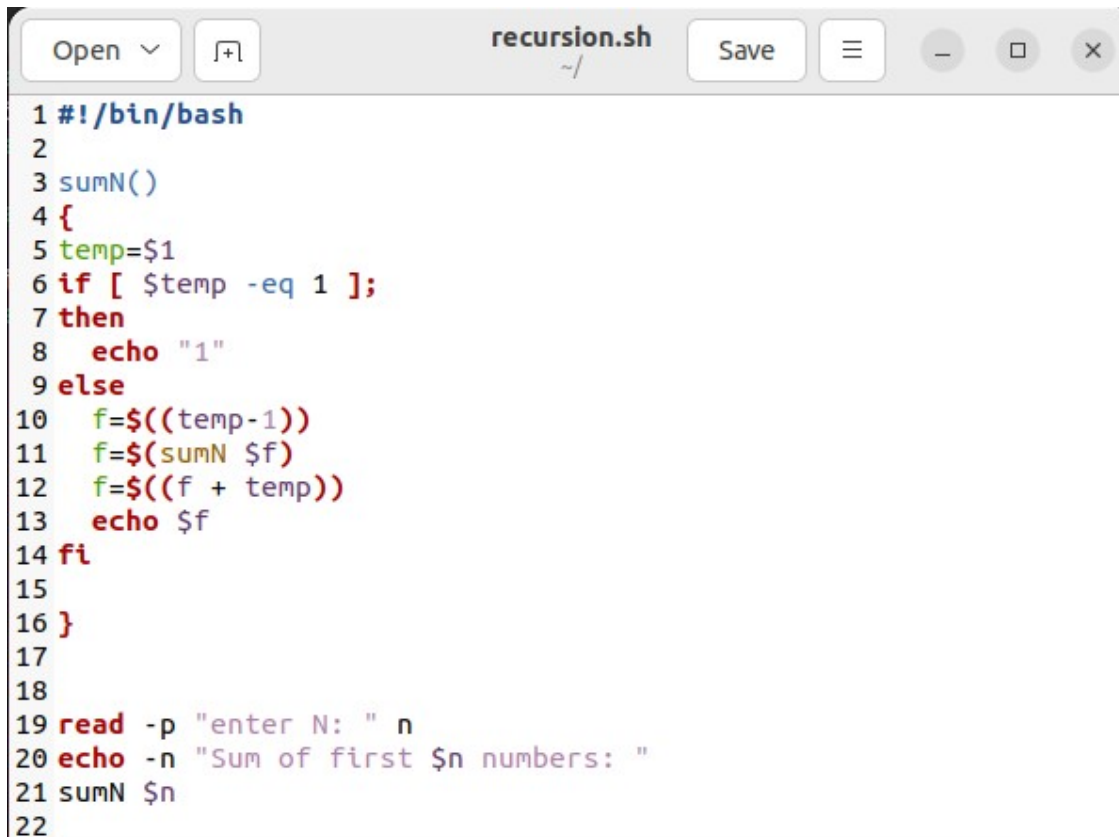
Assignment – 33 (Recursive Functions)

1) Write a program where the recursive function calculates the sum of N numbers

Output:

```
aswinsankesh@aswin-linux:~$ gedit recursion.sh &
[1] 3649
aswinsankesh@aswin-linux:~$ chmod +x recursion.sh
[1]+  Done                  gedit recursion.sh
aswinsankesh@aswin-linux:~$ ./recursion.sh
enter N: 6
Sum of first 6 numbers: 21
```

File:



```
1 #!/bin/bash
2
3 sumN()
4 {
5     temp=$1
6     if [ $temp -eq 1 ];
7     then
8         echo "1"
9     else
10        f=$((temp-1))
11        f=$(sumN $f)
12        f=$((f + temp))
13        echo $f
14    fi
15
16 }
17
18
19 read -p "enter N: " n
20 echo -n "Sum of first $n numbers: "
21 sumN $n
22
```