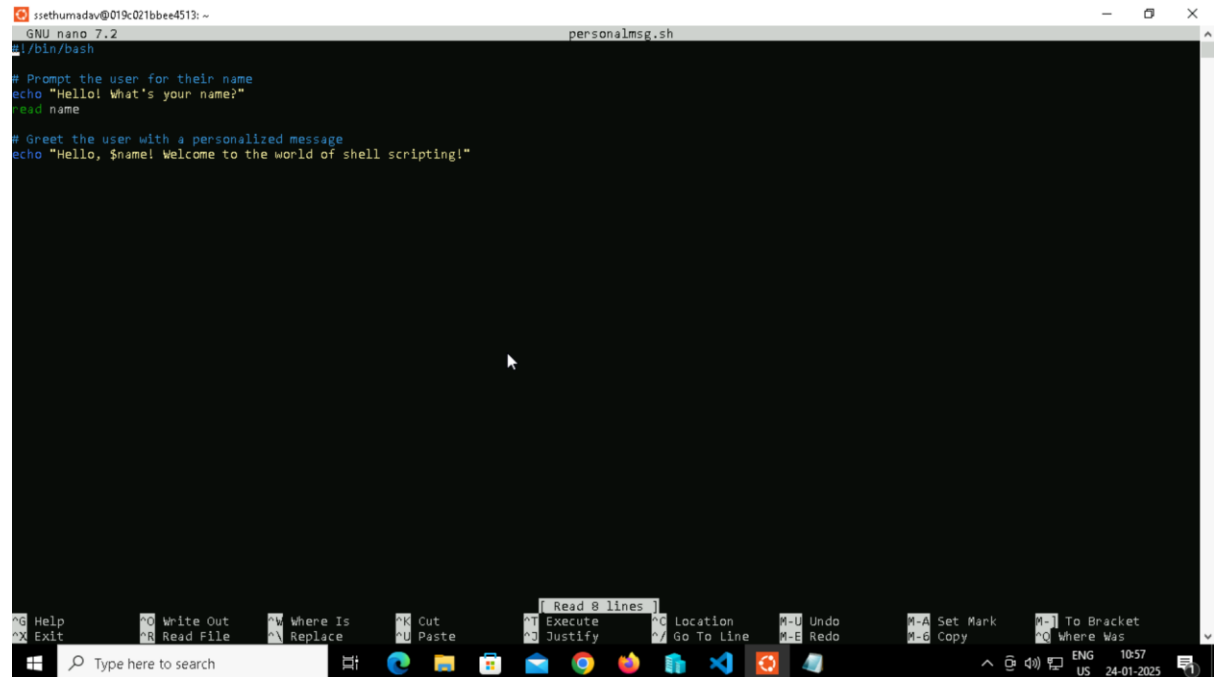


Personalized:

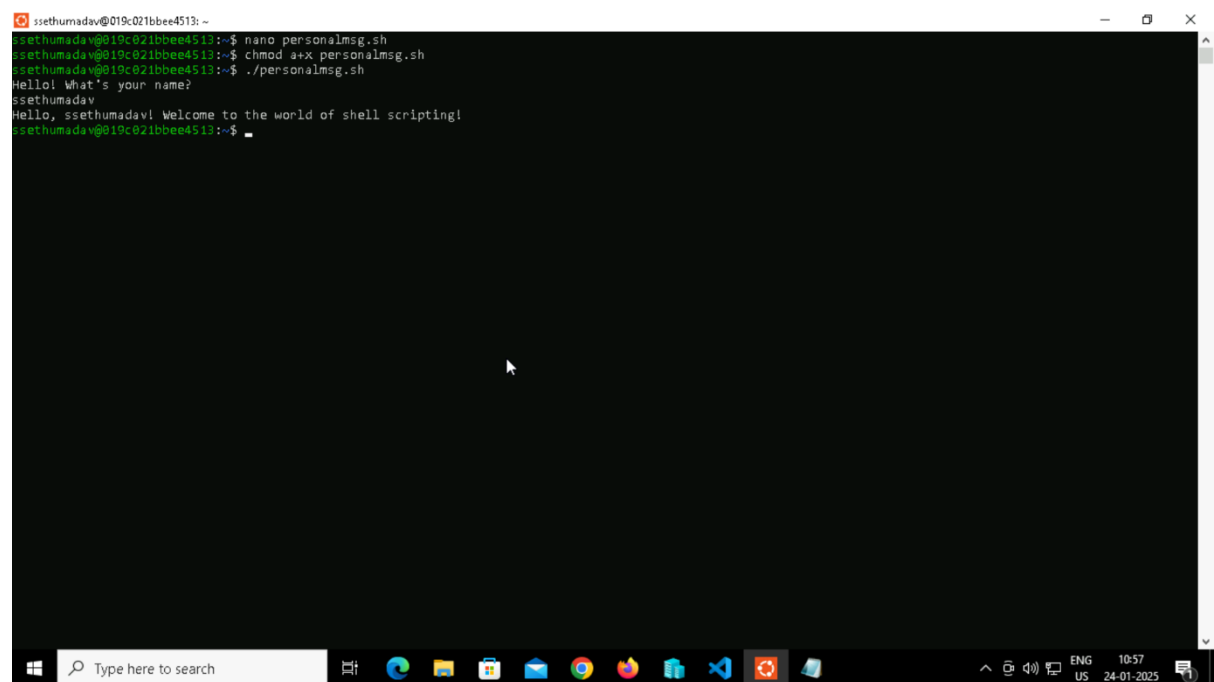
```
GNU nano 7.2 personalmsg.sh
#!/bin/bash

# Prompt the user for their name
echo "Hello! What's your name?"
read name

# Greet the user with a personalized message
echo "Hello, $name! Welcome to the world of shell scripting!"
```



```
ssethumadav@019c021bbee4513: ~
ssethumadav@019c021bbee4513:~$ nano personalmsg.sh
ssethumadav@019c021bbee4513:~$ chmod a+x personalmsg.sh
ssethumadav@019c021bbee4513:~$ ./personalmsg.sh
Hello! What's your name?
ssethumadav
Hello, ssethumadav! Welcome to the world of shell scripting!
ssethumadav@019c021bbee4513:~$
```



Add:

```
GNU nano 7.2 myscrip.sh
#!/usr/bin/bash
read -p "Input1 : " inp1
if [[ -z $inp1 ]]
then
    echo "Input 1 cannot be empty, please enter an integer."
    exit
fi

read -p "Input2 : " inp2
if [[ -z $inp2 ]]
then
    echo "Input 2 cannot be empty, please enter an integer."
    exit
fi

# Using $( ) for command substitution
bc_val=$(echo "$inp1 + $inp2" | bc)
echo "BC Value : $bc_val"

# Using expr correctly for addition
expr_val=$(expr $inp1 + $inp2)
echo "EXPR Value : $expr_val"
```

```
ssethumadv@019c021bbee4513: ~$ ./myscrip.sh
Input1 : 11
Input2 : 12
./myscrip.sh: line 16: 11+12: command not found
BC Value :
./myscrip.sh: line 19: 11: command not found
EXPR Value :
ssethumadv@019c021bbee4513: ~$ nano myscrip.sh
ssethumadv@019c021bbee4513: ~$ ./myscrip.sh
Input1 : 55
Input2 : 11
BC Value : 66
EXPR Value : 66
ssethumadv@019c021bbee4513: ~$ nano myscrip.sh
ssethumadv@019c021bbee4513: ~$ ./myscrip.sh
Input1 : 11
Input2 : 123456789
BC Value : 123456800
EXPR Value : 123456800
ssethumadv@019c021bbee4513: ~$
```

Bubble sort:

```
GNU nano 7.2      bubble.sh
Bubble sort in shell with static array

declare -a arr
arr=(10 8 20 100 12)

echo "Entered array:"
echo ${arr[@]}

for ((i = 0; i < 5; i++))
do
    for ((j = 0; j < 5-i-1; j++))
    do
        if [ ${arr[j]} -gt ${arr[j+1]} ]; then
            temp=${arr[j]}
            arr[j]=${arr[j+1]}
            arr[j+1]=$temp
        fi
    done
done
echo "Sorted array:"
echo ${arr[@]}
```

```
ssethumadav@019c021bbee4513: ~
Welcome to Ubuntu 24.04.1 LTS (GNU/Linux 5.15.167.4-microsoft-standard-WSL2 x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro

System information as of Fri Jan 24 04:21:57 UTC 2025

System load:  0.64          Processes:      59
Usage of /:   0.1% of 1006.85GB  Users logged in: 0
Memory usage: 5%            IPv4 address for eth0: 172.30.10.97
Swap usage:   0%            IPv4 address for eth0: 192.168.1.100

 * Strictly confined Kubernetes makes edge and IoT secure. Learn how MicroK8s
   just raised the bar for easy, resilient and secure K8s cluster deployment.

https://ubuntu.com/engage/secure-kubernetes-at-the-edge

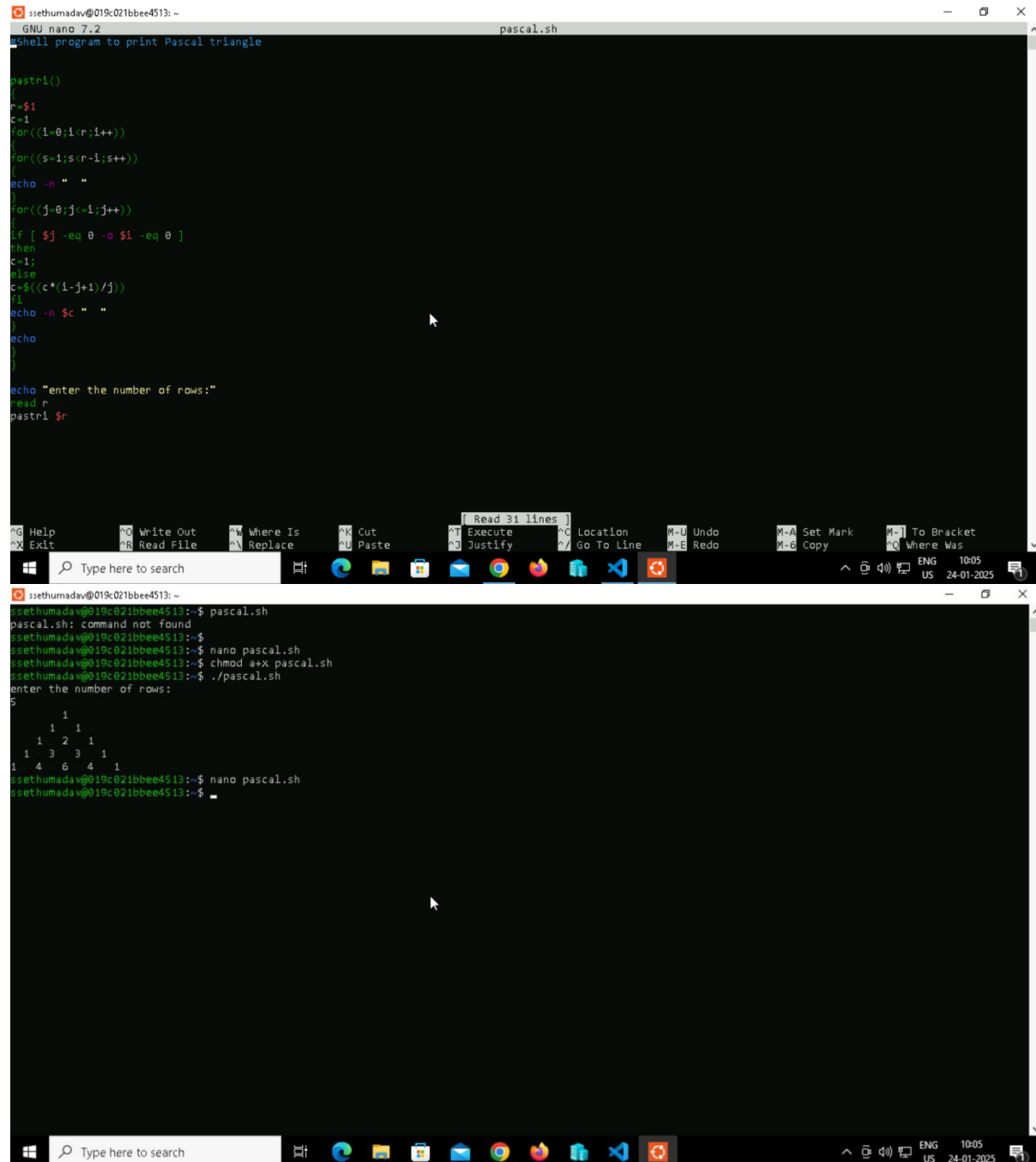
This message is shown once a day. To disable it please create the
/home/ssethumadav/.hushlogin file.
ssethumadav@019c021bbee4513:~$
ssethumadav@019c021bbee4513:~$ nano bubble.sh
ssethumadav@019c021bbee4513:~$ chmod a+x bubble.sh
ssethumadav@019c021bbee4513:~$ ./bubble.sh
Entered array:
10 8 20 100 12
Sorted array:
8 10 12 20 100
ssethumadav@019c021bbee4513:~$ nano bubble.sh
ssethumadav@019c021bbee4513:~$
```

Palindrome:

```
GNU nano 7.2      palindrome.sh
echo "Enter the number:"
read n
num=$n
rev=0
while [ $n -gt 0 ]
do
a=`expr $n % 10`
n=`expr $n / 10`
rev=`expr $rev \* 10 + $a`
done
echo $rev
if [ $num -eq $rev ]
then
    echo "The number is a palindrome!"
else
    echo "The number is not a palindrome number!"
fi

This message is shown once a day. To disable it please create the
/home/ssethumadav/.hushlogin file.
ssethumadav@019c021bbee4513:~$
ssethumadav@019c021bbee4513:~$ nano bubble.sh
ssethumadav@019c021bbee4513:~$ chmod a+x bubble.sh
ssethumadav@019c021bbee4513:~$ ./bubble.sh
Entered array:
10 8 20 100 12
Sorted array:
8 10 12 20 100
ssethumadav@019c021bbee4513:~$ nano bubble.sh
ssethumadav@019c021bbee4513:~$ nano palindrome.sh
ssethumadav@019c021bbee4513:~$ chmod a+x palindrome.sh
ssethumadav@019c021bbee4513:~$ ./palindrome.sh
Enter the number:
121
121
The number is a palindrome!
ssethumadav@019c021bbee4513:~$ nano palindrome.sh
ssethumadav@019c021bbee4513:~$
```

Pascal Triangle:



The image consists of two screenshots of a terminal window. The top screenshot shows the nano text editor editing a file named 'pascal.sh'. The script is a shell program to print Pascal's triangle. It takes an argument 'n' and prints the first 'n' rows of the triangle. The script uses nested loops to calculate each value based on the previous row's values. The bottom screenshot shows the terminal output after running the script. It shows the command 'pascal.sh' being executed, which results in 'command not found'. Then, 'nano pascal.sh' is used to edit the file, 'chmod a+x pascal.sh' is used to make it executable, and './pascal.sh' is used to run it. The output shows the first 5 rows of Pascal's triangle.

```
GNU nano 7.2 pascal.sh
#shell program to print Pascal triangle

pastr1()
{
  n=$1
  c=1
  for((i=0;i<n;i++))
  do
    for((s=1;s<n-i;s++))
    do
      echo -n " "
    done
    for((j=0;j<=i;j++))
    do
      if [ $j -eq 0 -o $i -eq 0 ]
      then
        c=1
      else
        c=$((c*(i-j+1)/j))
      fi
      echo -n "$c "
    done
    echo
  done

  echo "enter the number of rows:"
  read n
  pastr1 $n
}

pascal.sh: command not found
ssethumadav@019c021bbee4513:~$ nano pascal.sh
ssethumadav@019c021bbee4513:~$ chmod a+x pascal.sh
ssethumadav@019c021bbee4513:~$ ./pascal.sh
enter the number of rows:
5
      1
     1 1
    1 2 1
   1 3 3 1
  1 4 6 4 1
ssethumadav@019c021bbee4513:~$ nano pascal.sh
ssethumadav@019c021bbee4513:~$
```

Rev:

```
ssethumadv@019c021bbee4513: ~  
GNU nano 7.2 rev.sh  
n=2567  
rev=0  
sd=0  
  
while [ $n -gt 0 ]  
do  
sd=`expr $n % 10`  
rev=`expr $rev \* 10 + $sd`  
n=`expr $n / 10`  
done  
  
echo "Reverse Number is $rev"
```

```
ssethumadv@019c021bbee4513: ~  
ssethumadv@019c021bbee4513:~$ pascal.sh  
pascal.sh: command not found  
ssethumadv@019c021bbee4513:~$  
ssethumadv@019c021bbee4513:~$ nano pascal.sh  
ssethumadv@019c021bbee4513:~$ chmod a+x pascal.sh  
ssethumadv@019c021bbee4513:~$ ./pascal.sh  
enter the number of rows:  
5  
1  
1 1  
1 2 1  
1 3 3 1  
1 4 6 4 1  
ssethumadv@019c021bbee4513:~$ nano pascal.sh  
ssethumadv@019c021bbee4513:~$ nano rev.sh  
ssethumadv@019c021bbee4513:~$ chmod a+x rev.sh  
ssethumadv@019c021bbee4513:~$ ./rev.sh  
./rev.sh: line 7: [: -gt: unary operator expected  
Reverse Number is 0  
ssethumadv@019c021bbee4513:~$ nano rev.sh  
ssethumadv@019c021bbee4513:~$ nano rev.sh  
ssethumadv@019c021bbee4513:~$ ./rev.sh  
Reverse Number is 7652  
ssethumadv@019c021bbee4513:~$ nano rev.sh  
ssethumadv@019c021bbee4513:~$
```

Array Sum:

```
ssethumadav@019c021bbee4513: ~
GNU nano 7.2
arraysum.sh *
arr=(2 4 -5 -8 9 12)

for (( i = 0; i <= ${#arr[*]}; i++ )); do
    if (( arr[i] > 0 )); then
        sum=expr $sum + ${arr[i]}
    fi
done
echo "$sum"
```

File Name to Write: arraysum.sh

NG Help
NG Cancel

M-D DOS Format
M-M Mac Format

M-A Append
M-B Prepend

M-B Backup File
Browse

Type here to search

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US 24-01-2025

```
ssethumadav@019c021bbee4513: ~
ssethumadav@019c021bbee4513:~$ pascal.sh
pascal.sh: command not found
ssethumadav@019c021bbee4513:~$ nano pascal.sh
ssethumadav@019c021bbee4513:~$ chmod a+x pascal.sh
ssethumadav@019c021bbee4513:~$ ./pascal.sh
enter the number of rows:
5
      1
     1 1
    1 2 1
   1 3 3 1
  1 4 6 4 1
ssethumadav@019c021bbee4513:~$ nano pascal.sh
ssethumadav@019c021bbee4513:~$ nano rev.sh
ssethumadav@019c021bbee4513:~$ chmod a+x rev.sh
ssethumadav@019c021bbee4513:~$ ./rev.sh
./rev.sh: line 7: [: -gt: unary operator expected
Reverse Number is 0
ssethumadav@019c021bbee4513:~$ nano rev.sh
ssethumadav@019c021bbee4513:~$ nano rev.sh
ssethumadav@019c021bbee4513:~$ ./rev.sh
Reverse Number is 7652
ssethumadav@019c021bbee4513:~$ nano rev.sh
ssethumadav@019c021bbee4513:~$ nano arraysum.sh
ssethumadav@019c021bbee4513:~$ chmod a+x arraysum.sh
ssethumadav@019c021bbee4513:~$ ./arraysum.sh
27
ssethumadav@019c021bbee4513:~$
```

Type here to search

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