1. Write a shell program to perform the addition of two numbers.

echo "Enter the 1st number"

read a

echo "Enter the 2nd number"

read b

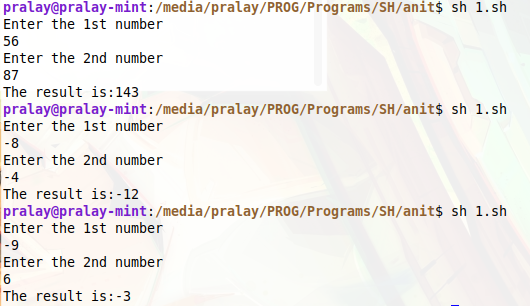
S=`expr $a + $b`

echo "The result is:"$S

Bash Script



Output



1. Write shell script to show the all-natural numbers from 1 to n ( n is taken from the user ).

read -p "Enter the limit of the series:" n

i=1

echo -n "\nThe realnumber series is:"

while [ $i -le $n ]

do

echo -n " " $i

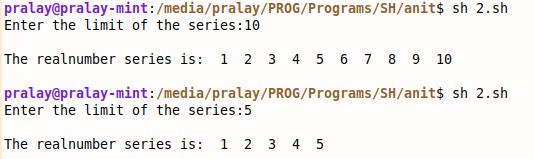
i=`expr $i + 1`

done

Bash Script



Output



1. Write a shell program to find the maximum number between two number

echo "Ente the 1st number"

read a

echo "Ente the 2nd number"

read b

if [ $a -gt $b ]

then

echo "The greater number is:"$a

else

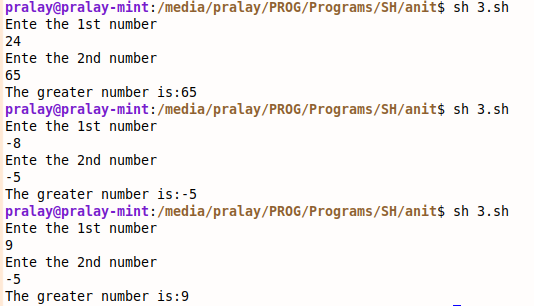
echo "The greater number is:"$b

fi

Bash Script



Output



1. Write a shell script program to calculate the what is the greater number between three number.

echo "Enter the numbers"

read a b c

if [ $a -gt $b ]

then

if [ $a -gt $c ]

then

echo "The greater number is:"$a

else

echo "The greater number is:"$c

fi

elif [ $a -eq $b -a $b -eq $c ]

then

echo "The number are equal"

else

if [ $b -gt $c ]

then

echo "The greater number is:"$b

else

echo "The greater number is:"$c

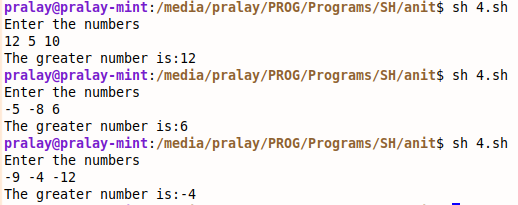
fi

fi

Bash Script



Output



1. Write a shell script program to find the number is even or odd.

echo "Enter the number"

read n

s=`expr $n % 2`

if [ $s -eq 0 ]

then

echo "The number is even"

else

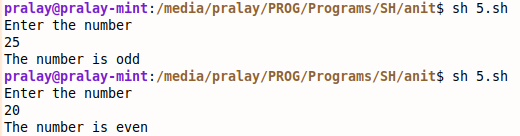
echo "The number is odd"

fi

Bash Script



Output



1. Write a shell script to check whether a year is leapyear or not.

read -p "Enter the year: " year

if ((year % 400 == 0 && year % 100 == 0 || year % 4 == 0)); then

    echo -e "\n$year year is leap year\n"

else

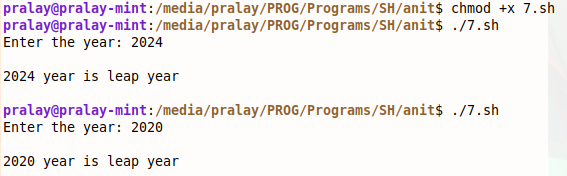
    echo -e "\nThe year is not leap year\n"

fi

Bash Script



Output



1. Write a shell script to print the factorial of a user given number.

echo -n "Enter a number: "

read num

fact=1

for (( i=1; i<=num; i++ ))

do

fact=$((fact \* i))

done

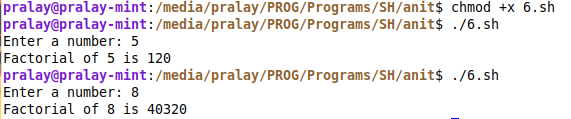
echo "Factorial of $num is $fact"

Bash Script



Output





1. Write a shell scrip to print the Fibonacci series:

0, 1, 1, 2, 3, 5, ….Nth term.

read -p "Enter the limit:" f

i=0

a=0

b=1

echo -n "The series is:" $a $b

while [ $i -le `expr $f - 2` ]

do

c=`expr $a + $b`

a=$b

b=$c

echo -n " "$c

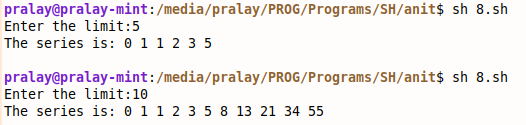
i=`expr $i + 1`

done

Bash Script



Output



1. Write shell script to check the number is prime or not.

echo -n "Enter a number: "

read num

if [ $num -lt 2 ]; then

    echo "$num is not a prime number."

    exit 0

fi

is\_prime=1

for ((i = 2; i <= $num; i++)); do

    if [ $((num % i)) -eq 0 ]; then

        is\_prime=0

        break

    fi

done

if [ $is\_prime -eq 1 ]; then

    echo "$num is a prime number."

else

    echo "$num is not a prime number."

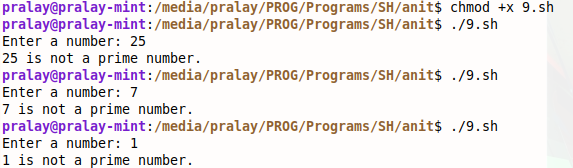
fi

Bash Script



Output





1. Write a shell script to display all prime numbers from 1 to N.

read -p "Enter the limit: " limit

if ((limit <= 0)); then

    echo -e "\n\tInvalid input\n"

    exit

fi

echo -n "The prime numbers up to $limit are: "

for ((i = 1; i <= limit; i++)); do

    count=0

    for ((j = 2; j <= i / 2; j++)); do

        if ((i % j == 0)); then

            ((count++))

        fi

    done

    if ((!count)); then

        echo -n "$i "

    fi

done

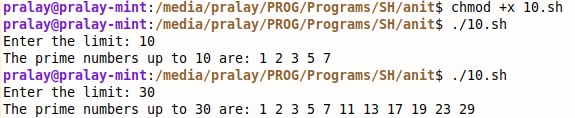
echo

Bash Script



Output





1. Write a shell script to print the GCD & LCM of two numbers.

read -p "Enter the 1st number:" n1

read -p "Enter the 1st number:" n2

if [ $n1 -gt $n2 ]

then

num=$n1

den=$n2

else

num=$n2

den=$n1

fi

rem=`expr $num % $den`

while [ $rem -ne 0 ]

do

num=$den

den=$rem

rem=`expr $num % $den`

done

gcd=$den

lcm=`expr $n1 \\* $n2 / $gcd`

echo "The GCD is:" $gcd

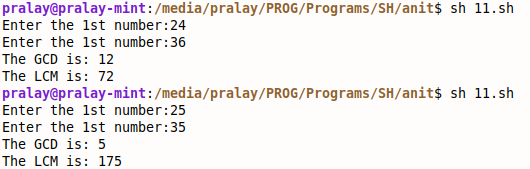
echo "The LCM is:" $lcm

Bash Script



Output





1. Write a shell program to convert Centigrade to Fahrenheit.

echo "Enter the centigrade value"

read c

F=`expr $c \\* 9 / 5 + 32`

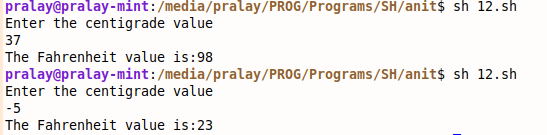
echo "The Fahrenheit value is:"$F

Bash Script



Output





1. Write a shell script to calculate simple interest.

echo "Ente the principal ammount"

read p

echo "Enter the time period"

read t

echo "Enter the rate of interest"

read r

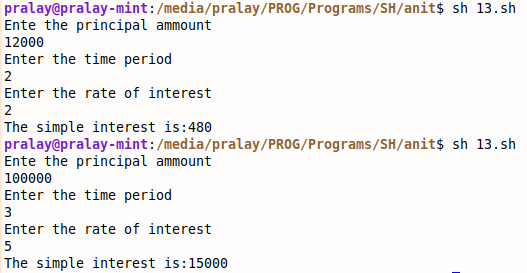
I=`expr $p \\* $t \\* $r / 100`

echo "The simple interest is:"$I

Bash Script



Output



1. Write a shell script to swapping of two numbers.

echo "Enter the 1st number"

read a

echo "Enter the 2nd number"

read b

echo "\nThe values before swap\n" $a $b

c=$a

a=$b

b=$c

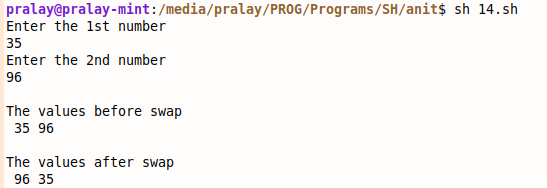
echo "\nThe values after swap\n" $a $b

Bash Script



Output





1. Write a shell script to print left pyramid pattern:

\*

\* \*

\* \* \*

read -p "Enter the number of line:" n

i=1

j=1

echo ""

while [ $i -le $n ]

do

j=1

while [ $j -le $i ]

do

echo -n " \*"

j=`expr $j + 1`

done

echo ""

i=`expr $i + 1`

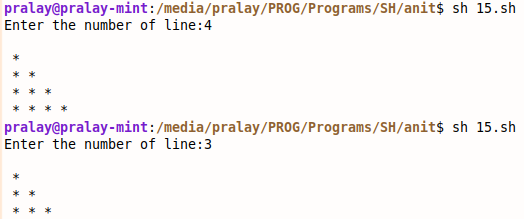
done

Bash Script



Output





1. Write a shell script to print this pattern: 1

1 2

1 2 3

1 2 3 4

read -p "Enter the number of line:" n

i=1

j=1

echo ""

while [ $i -le $n ]

do

j=1

while [ $j -le $i ]

do

echo -n " "$j

j=`expr $j + 1`

done

echo ""

i=`expr $i + 1`

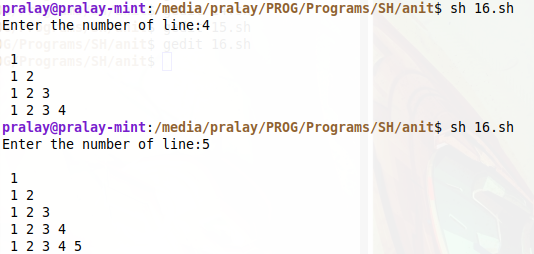
done

Bash Script



Output





1. Write a shell script to print left pyramid pattern:

\*

\* \* \*

\* \* \* \* \*

read -p "Enter the number of rows for the pyramid: " rows

for (( i=1; i<=rows; i++ ))

do

# Print spaces

for (( j=rows; j>i; j-- ))

do

echo -n " "

done

# Print stars

for (( k=1; k<=((2\*i-1)); k++ ))

do

echo -n "\*"

done

# Move to the next line

echo

done

Bash Script



Output



1. Write a shell script to print left pyramid pattern:

\*

\* \*

\* \* \*

echo -n "Enter number of rows: "

read rows

for ((i=1; i<=rows; i++))

do

for ((j=i; j<rows; j++))

do

echo -n " "

done

for ((k=1; k<=i; k++))

do

echo -n "\* "

done

echo

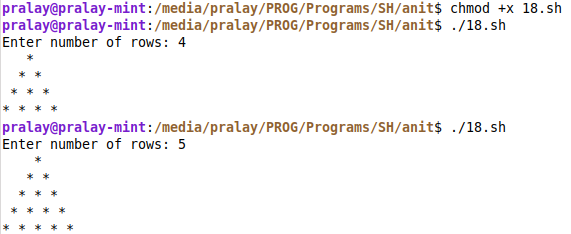
done

Bash Script



Output





1. Write a shell script to print left pyramid pattern:

1

2 3

4 5 6

7 8 9 10

read -p "Enter the number of rows for the pattern: " rows

number=1

for (( i=1; i<=rows; i++ ))

do

# Print numbers in the required pattern

for (( j=1; j<=i; j++ ))

do

echo -n "$number "

((number++))

done

# Move to the next line

echo

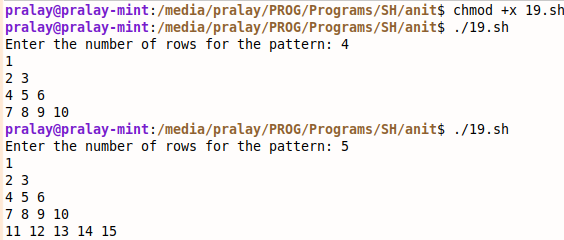
done

Bash Script



Output





1. Write a shell script to print left pyramid pattern:

\* \* \* \*

\* \* \*

\* \*

\*

read -p "Enter the number of rows for the pattern: " rows

for (( i=rows; i>=1; i-- ))

do

# Print stars in decreasing order

for (( j=1; j<=i; j++ ))

do

echo -n "\*"

done

# Move to the next line

echo

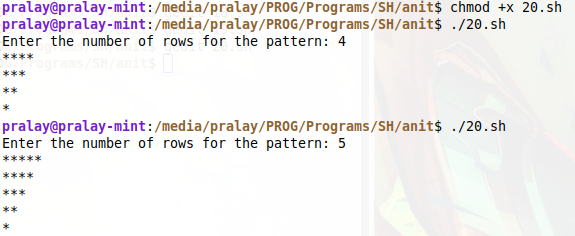
done

Bash Script



Output





1. Write a shell script to print the series: 1! + 2! + 3! + …….. + N!

# Prompt user for input

read -p "Enter the value of N: " N

# Initialize sum variable

sum=0

# Loop through numbers from 1 to N

for ((j=1; j<=N; j++)); do

# Calculate factorial of the current number

fact=1

for ((k=1; k<=j; k++)); do

fact=$((fact \* k))

done

# Add the factorial to the sum

sum=$((sum + fact))

# Print the addition step

if [[ $j -eq 1 ]]; then

echo -n "$fact"

else

echo -n " + $fact"

fi

done

# Print the final sum

echo " = $sum"

Bash Script



Output



