AYUSH RAWAT MCA (1st Sem) B STD-ID 22391138

**PROBLEM STATEMENT:**

Write a BASH shell script to find and display the sum of the following  
series (The value of N is taken as input from the user)  
1 + 2! + 3! + 4! + 5! + 6! + ... + N!

**OBJECTIVE:**

To find and display the sum of the following series 1 + 2! + 3! + 4! + 5! + 6! + ... + N!, where N is user entered number.

**SHELL SCRIPT:**

echo "Shell script to find and display the sum of the following series 1 + 2! + 3! + 4! + 5! + 6! + ... + N!, where N is user entered number."

echo "Enter a positive integer:"

read n

let sum=0

let f=1

for ((num = 1; num <= $n; num++)); do

f=$(($f \* $num))

sum=$(($sum + $f))

done

echo "The solution for the given series when n = $n is: $sum"