**Vellore Institute of Technology**

**Principles of Operating Systems Lab (CBS1006)**

**Digital Assignment 1**

**Date**: 16 August 2022  
**Name**: Anuj Parihar  
**Registration Number**: 21BBS0162

**Question 1:** Create a shell script program that uses a "for" loop to find the factorial of a given number.

**Code:**

echo "Registration Number: 21BBS0162"

echo "Name: Anuj Parihar"

echo "Enter a number: "

read num

fact=1

for i in `seq 1 $num`

do

fact=$((fact\*i))

done

echo "Factorial of $num is $fact"

**Screenshot:**

Text

Description automatically generated

**Question 2:** Write a shell script program that numerical value (0 to 5) to print the following pattern (shown below). To print the left and right parts of the pattern, use nested loops.

**Code:**

echo "Registration Number: 21BBS0162"

echo "Name: Anuj Parihar"

i=0

j=0

x=5

while [ $i -le 5 ]

do

j=0

while [ $j -le 5 ]

do

if [ 5 -le `expr $i + $j` ]

then

echo -ne "$x"

else

echo -ne " "

fi

j=`expr $j + 1`

done

echo

i=`expr $i + 1`

x=`expr $x - 1`

done

**Screenshot:**

Text

Description automatically generated