Ex. No. 2 (a)

Date: 30.01.2025

SHELL SCRIPT – ARITHMETIC OPERATIONS USING EXPR COMMAND

Aim: To write a Shell script to display basic calculator.

Program:

```
echo "Enter two nos:"
read num1 read
num2
addi='expr $num1 + $num2' sub='expr
$num1 - $num2`
mul=`expr $num1 \* $num2`
if [ $num2 -ne 0 ]; then
div=`expr $num1 / $num2`
mod=`expr $num1 % $num2` else
div="undefined (division by zero)"
mod="undefined (division by zero)"
fi
echo "Add: $addi"
echo "Sub: $sub"
echo "Mul: $mul"
echo "Div: $div" echo
"Mod: $mod"
```

Output:

```
Enter two number
5
10
add 15
sub -5
mul 50
div 0
mod 5
```

Result:

Hence, the basic calculator program was executed successfully.

Ex. No. 2 (b)

Date: 30.01.2025

SHELL SCRIPT - LEAP YEAR USING IF-ELSE

Aim:

To write a Shell script to test given year is leap or not using conditional statement.

Program:

```
echo "Enter a year:" read
year

if [$((year % 400)) -eq 0] ||
{
      [$((year % 4)) -eq 0] &&
      [$((year % 100)) -ne 0]
}; then
      echo "$year is a Leap Year"
else echo "$year is not a Leap
Year" fi
```

Output:

```
[csel95@fedora ~]$ sh ex_3.1.sh
Ex.2.2 LEAP YEAR
Enter a year:
2020
2020 is a Leap Year
```

Result:

Hence, the Shell Script to check leap year was executed successfully.