

SHELL SCRIPT

AADITYA P

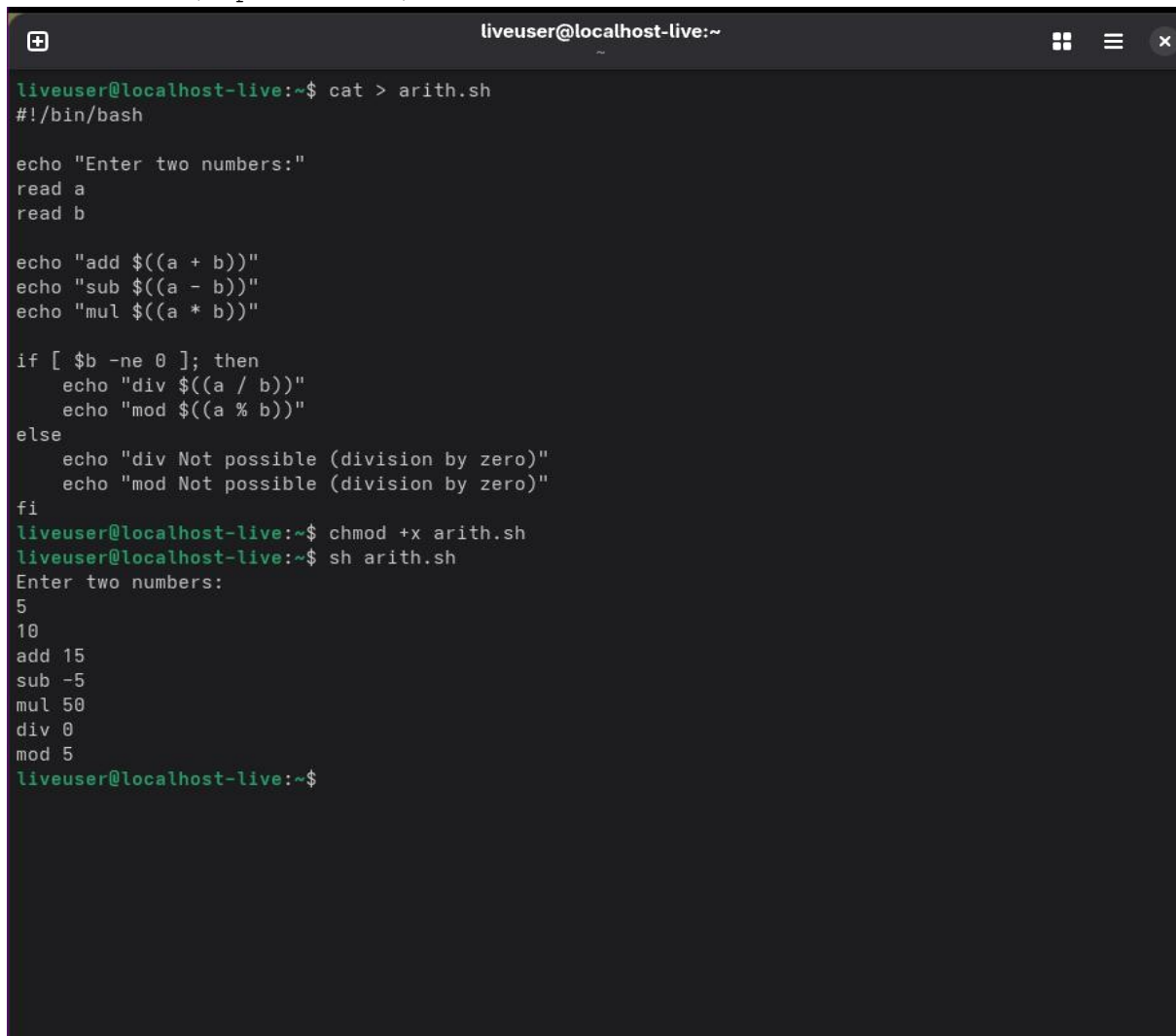
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EXP-2

BASIC CALCULATOR

```
#BASIC CALCULATOR
echo "Enter two no"
read a
read b

echo "add $(expr $a + $b) "
echo "sub $(expr $a - $b) "
echo "mul $(expr $a \* $b) "
echo "div $(expr $a / $b) "
echo "mod $(expr $a % $b) "
```

A terminal window titled 'liveuser@localhost-live:~' with standard window controls. The terminal shows the creation of a script 'arith.sh' using 'cat', its execution with 'sh arith.sh', and the user inputting two numbers, 5 and 10. The script then outputs the results of addition, subtraction, multiplication, division, and modulo operations.

```
liveuser@localhost-live:~$ cat > arith.sh
#!/bin/bash

echo "Enter two numbers:"
read a
read b

echo "add $((a + b))"
echo "sub $((a - b))"
echo "mul $((a * b))"

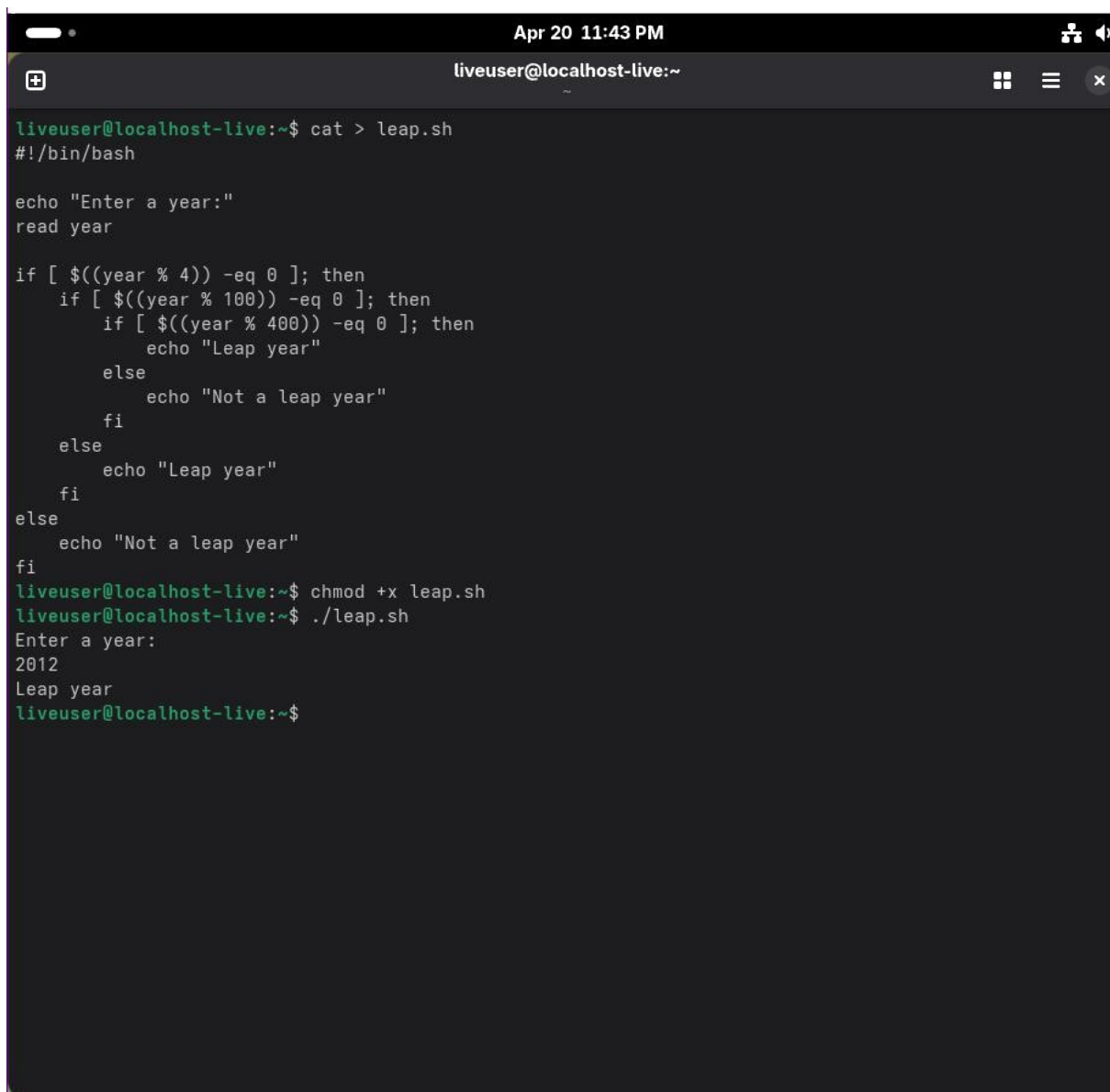
if [ $b -ne 0 ]; then
    echo "div $((a / b))"
    echo "mod $((a % b))"
else
    echo "div Not possible (division by zero)"
    echo "mod Not possible (division by zero)"
fi

liveuser@localhost-live:~$ chmod +x arith.sh
liveuser@localhost-live:~$ sh arith.sh
Enter two numbers:
5
10
add 15
sub -5
mul 50
div 0
mod 5
liveuser@localhost-live:~$
```

LEAP YEAR

```
#LEAP YEAR OR NOT
echo "Enter a year"
read year

if [ $((year % 4)) -eq 0 ];then
    echo "$year is a Leap Year"
else
    echo "$year is Not a Leap Year"
fi
```

A terminal window titled 'liveuser@localhost-live:~' with a timestamp 'Apr 20 11:43 PM'. The user enters 'cat > leap.sh' and pastes the following script:

```
#!/bin/bash

echo "Enter a year:"
read year

if [ $((year % 4)) -eq 0 ]; then
    if [ $((year % 100)) -eq 0 ]; then
        if [ $((year % 400)) -eq 0 ]; then
            echo "Leap year"
        else
            echo "Not a leap year"
        fi
    else
        echo "Leap year"
    fi
else
    echo "Not a leap year"
fi
```

The user then runs 'chmod +x leap.sh' and './leap.sh'. The prompt 'Enter a year:' is shown, followed by the input '2012'. The script outputs 'Leap year'.