

Ex. No.: 2(a)**Shell Script****Date: 28.01.2025****Aim:**

To write a Shell script that performs basic arithmetic operations (Addition, Subtraction, Multiplication, Division, and Modulus) on two user-input numbers.

Algorithm:

1. Start the script.
 2. Prompt the user to enter two numbers.
 3. Read the input values.
 4. Perform arithmetic operations: addition, subtraction, multiplication.
 5. Check for division by zero:
 - If not zero, perform division and modulus.
 - If zero, display an appropriate error message.
 6. Display the results.
 7. End the script.
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Program: (arith.sh)

```
#!/bin/bash
```

```
# Basic Calculator Script
```

```
echo "Enter two numbers:"
```

```
read a
```

```
read b
```

```
add=$((a + b)) sub=$((a
- b))
mul=$((a * b))
```

```
# Check for division/modulus by zero
```

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```
if [ "$b" -ne 0 ]; then
    div=$((a / b))
    mod=$((a % b))
else div="Error: Division by zero"
    mod="Error: Modulus by
zero"
fi
```

```
# Display Results
```

```
echo "Addition : $add" echo
"Subtraction  : $sub" echo
"Multiplication : $mul" echo
"Division    :  $div"  echo
"Modulus     : $mod"
```

Sample Input and Output:

```
[REC@localhost ~]$ sh arith.sh
```

```
Enter two numbers:
```

```
5
```

```
10
```

```
Addition      15
```

Subtraction : -5

Multiplication 50

Division 0 Modulus 5

Result:

The Shell script to perform basic arithmetic operations was successfully implemented, executed, and the output was verified.