

# Bash Arithmetic operation

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## 3 ways to do arithmetic operation in Bash

### 1. Using 'expr' Command

- `expr '10 + 30'`

### 2. Using 'let' Command

- Multiplying 9 by 8
- `let val1=9*3`
- `echo $val1`

### 3. Using Double Brackets

- Calculate the mathematical expression
- `val1=$((10*5+15))`
- `echo $val1`

```

bashScript.sh (~/.Desktop)
File Edit View Search Tools Documents Help
bashScript.sh x
#!/usr/bin/bash

x=100
y=10
echo "Addition"
echo $(( $x + $y ))
echo "Subtraction"
echo $(( $x - $y ))
echo "Multiplication"
echo $(( $x * $y ))
echo "Division"
echo $(( $x / $y ))
echo "Exponentiation"
echo $(( $x ** $y ))
echo "Modular"
echo $(( $x % $y ))
echo "Incrementing x by 5, then x= "
(( x += 5 ))
echo $x
echo "Decrementing x by 5, then x= "
(( x -= 5 ))
echo $x
echo "Multiply of x by 5, then x="
(( x *= 5 ))
echo $x
echo "Dividing x by 5, x= "
(( x /= 5 ))
echo $x
echo "Remainder of Dividing x by 5, x="
(( x %= 5 ))
echo $x

devops@devops-Lenovo-G410: ~/.Desktop
File Edit View Search Terminal Help
devops@devops-Lenovo-G410:~/.Desktop$ ./bashScript.sh
Addition
110
Subtraction
90
Multiplication
1000
Division
10
Exponentiation
7766279631452241920
Modular
0
Incrementing x by 5, then x=
105
Decrementing x by 5, then x=
100
Multiply of x by 5, then x=
500
Dividing x by 5, x=
100
Remainder of Dividing x by 5, x=
0
devops@devops-Lenovo-G410:~/.Desktop$

```

Here, some arithmetic operations has been done by using double bracket .

[https://linuxhint.com/bash\\_arithmetic\\_operations/](https://linuxhint.com/bash_arithmetic_operations/)