

# OS - Shell Script

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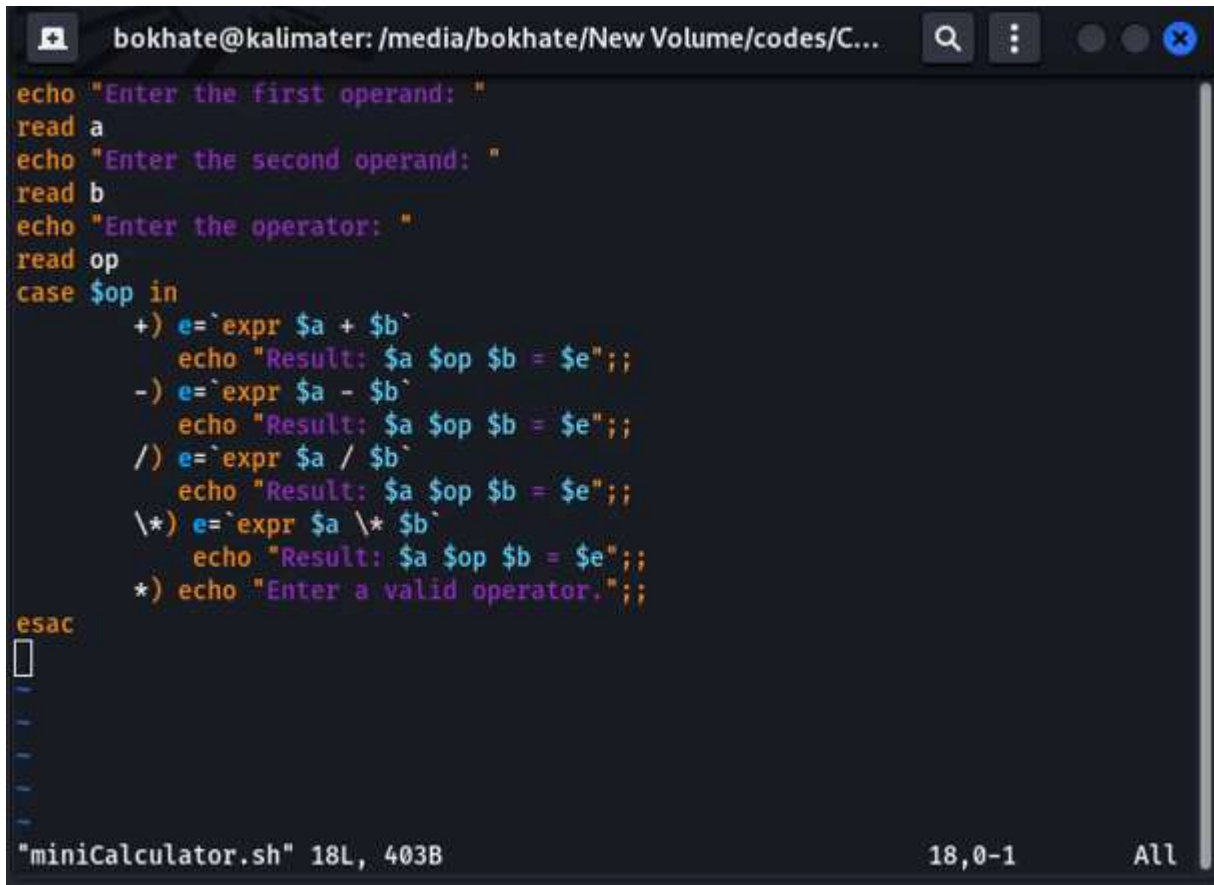
Code:

Output:

2

Write a shell script to perform an arithmetic operation upon two inputs. The operation should also be input by the user.

Code:



```
bokhate@kalimater: /media/bokhate/New Volume/codes/C...
echo "Enter the first operand: "
read a
echo "Enter the second operand: "
read b
echo "Enter the operator: "
read op
case $op in
    +) e=`expr $a + $b`
        echo "Result: $a $op $b = $e";;
    -) e=`expr $a - $b`
        echo "Result: $a $op $b = $e";;
    /) e=`expr $a / $b`
        echo "Result: $a $op $b = $e";;
    \*) e=`expr $a \* $b`
        echo "Result: $a $op $b = $e";;
    *) echo "Enter a valid operator.";;
esac
[
~
~
~
~
~
"miniCalculator.sh" 18L, 403B 18,0-1 All
```

Output:

```
bokhate@kalimater: /media/bokhate/New Volume/codes/C...  
  
(bokhate@kalimater)-[/media/.../3rd-sem/ca2/os/pca1]  
$ vi miniCalculator.sh  
  
(bokhate@kalimater)-[/media/.../3rd-sem/ca2/os/pca1]  
$ sh miniCalculator.sh  
Enter the first operand:  
8  
Enter the second operand:  
2  
Enter the operator:  
+  
Result: 8 + 2 = 10  
  
(bokhate@kalimater)-[/media/.../3rd-sem/ca2/os/pca1]  
$ sh miniCalculator.sh  
Enter the first operand:  
8  
Enter the second operand:  
2  
Enter the operator:  
-  
Result: 8 - 2 = 6
```

```
bokhate@kalimater: /media/bokhate/New Volume/codes/C...  
  
(bokhate@kalimater)-[/media/.../3rd-sem/ca2/os/pca1]  
$ sh miniCalculator.sh  
Enter the first operand:  
8  
Enter the second operand:  
2  
Enter the operator:  
/  
Result: 8 / 2 = 4  
  
(bokhate@kalimater)-[/media/.../3rd-sem/ca2/os/pca1]  
$ sh miniCalculator.sh  
Enter the first operand:  
8  
Enter the second operand:  
2  
Enter the operator:  
*  
Result: 8 * 2 = 16
```

```
bokhate@kalimater: /media/bokhate/New Volume/codes/C...  
  
(bokhate@kalimater)-[/media/.../3rd-sem/ca2/os/pca1]  
$ sh miniCalculator.sh  
Enter the first operand:  
8  
Enter the second operand:  
2  
Enter the operator:  
^  
Enter a valid operator.
```



Write a shell script to find out the smallest among 3 inputs.

Code:

```
bokhate@kalimater: /media/bokhate/New Volume/codes/C...
echo "Enter three numbers: "
read a b c
if test $a -lt $b -a $a -lt $c
then
    echo "$a is the smallest."
else
    if test $b -lt $a -a $b -lt $c
    then
        echo "$b is the smallest."
    else
        echo "$c is the smallest."
    fi
fi
```

Output:

```
bokhate@kalimater: /media/bokhate/New Volume/codes/C...

(bokhate@kalimater)-[/media/.../3rd-sem/ca2/os/pca1]
$ vi minOfThree.sh

(bokhate@kalimater)-[/media/.../3rd-sem/ca2/os/pca1]
$ sh minOfThree.sh
Enter three numbers:
2 3 6
2 is the smallest.

(bokhate@kalimater)-[/media/.../3rd-sem/ca2/os/pca1]
$ sh minOfThree.sh
Enter three numbers:
3 2 6
2 is the smallest.

(bokhate@kalimater)-[/media/.../3rd-sem/ca2/os/pca1]
$ sh minOfThree.sh
Enter three numbers:
3 6 2
2 is the smallest.

(bokhate@kalimater)-[/media/.../3rd-sem/ca2/os/pca1]
$
```

Write a shell script to print all the multiplication table of a number input by the user.

Code:

```
bokhate@kalimater: /media/bokhate/New Volume/codes/C...
echo "Enter a number: "
read num
echo "Table of $num is: "
for i in `seq 1 10`
do
    echo "$num\t*\t\t$i\t=\t\t`expr $num \* $i`"
done
```

Output:

```
bokhate@kalimater: /media/bokhate/New Volume/codes/C...

(bokhate@kalimater)-[/media/.../3rd-sem/ca2/os/pca1]
$ vi showTable.sh

(bokhate@kalimater)-[/media/.../3rd-sem/ca2/os/pca1]
$ sh showTable.sh
Enter a number:
6
Table of 6 is:
6      *      1      =      6
6      *      2      =      12
6      *      3      =      18
6      *      4      =      24
6      *      5      =      30
6      *      6      =      36
6      *      7      =      42
6      *      8      =      48
6      *      9      =      54
6      *      10     =      60

(bokhate@kalimater)-[/media/.../3rd-sem/ca2/os/pca1]
$
```

Write a shell script to generate the series of even numbers like 0,2,4,6....n (n is given by user):

Code:

```
bokhate@kalimater: /media/bokhate/New Volume/codes/C...
echo "Enter a number: "
read num
echo "Even series till $num is: "
echo `seq 0 2 $num`
```

Output:

```
bokhate@kalimater: /media/bokhate/New Volume/codes/C...

(bokhate@kalimater)-[/media/.../3rd-sem/ca2/os/pca1]
$ vi evenSeries.sh

(bokhate@kalimater)-[/media/.../3rd-sem/ca2/os/pca1]
$ sh evenSeries.sh
Enter a number:
10
Even series till 10 is:
0 2 4 6 8 10

(bokhate@kalimater)-[/media/.../3rd-sem/ca2/os/pca1]
$ sh evenSeries.sh
Enter a number:
100
Even series till 100 is:
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100

(bokhate@kalimater)-[/media/.../3rd-sem/ca2/os/pca1]
$

(bokhate@kalimater)-[/media/.../3rd-sem/ca2/os/pca1]
$
```