

Assignment 1

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Q1. Write a shell script to enter the value of two variables.
Perform the basic calculator operations and print the outputs.

```
(kali㉿kali)-[~/Desktop/practice]
$ vi add

(kali㉿kali)-[~/Desktop/practice]
$ ./add
Addition of two numbers
Enter the 1 number
2
Enter the 2 number
3
_____
Sum = 5
_____

By expr shell
sum = 5
_____

Subtracting
subtract= -1
_____

Multiplication
Multiplication = 6
_____

Division
Division = 0

(kali㉿kali)-[~/Desktop/practice]
$
```

```
└─$ cat add
echo "Addition of two numbers"
echo "Enter the 1 number"
read x
echo "Enter the 2 number"
read y
echo "_____ "
sum=$((x+y))
echo "Sum = $sum"
echo "_____ "
echo "By expr shell"
sum=`expr $x + $y`
echo "sum = $sum"
echo "_____ "
echo "Subtracting "
sum=`expr $x - $y`
echo "subtract= $sum"
echo "_____ "
echo "Multiplication"
sum=`expr $x \* $y`
echo "Multiplication = $sum"
echo "_____ "
echo "Division"
sum=`expr $x / $y`
echo "Division = $sum"

(kali㉿kali)-[~/Desktop/practice]
└─$
```

Q2. Write a shell script to read the marks of 5 subjects and find the percentage of the student

```
File Actions Edit View Help
└─$ ./marks
Enter the 5 marks
60 60 60 60 60
percentage = 60

(kali㉿kali)-[~/Desktop/practice]
└─$ vi marks

(kali㉿kali)-[~/Desktop/practice]
└─$ cat marks
echo "Enter the 5 marks"
read m1 m2 m3 m4 m5
sum=`expr $m1 + $m2 + $m3 + $m4 + $m5`
l=100
m=500
p=$((sum*l))
per=$((p/m))

echo "percentage = $per"

(kali㉿kali)-[~/Desktop/practice]
└─$ ./marks
Enter the 5 marks
80 80 45 96 65
percentage = 73

(kali㉿kali)-[~/Desktop/practice]
└─$
```

Q3. WSS to enter the name of a file and display the content of the file and also append some more content into the same file and again print.

```
File Actions Edit View Help
~/Desktop/shiva
(kali㉿kali)-[~/Desktop/practice]
$ cat contentappend
echo "Enter the name of the file"
read x
echo "_____"
cat $x
echo "_____"
echo "add some new content to the same file $x"
cat >> $x
echo "Content after append"
cat $x

(kali㉿kali)-[~/Desktop/practice]
$ ./contentappend
Enter the name of the file
s1
cat: s1: No such file or directory

add some new content to the same file s1
s
sd
d
^C
(kali㉿kali)-[~/Desktop/practice]
$
```

Q4. Take two values as input in the variable x and y and swap the values

- i) Use a 3rd variable
- ii) Do not use 3rd variable

```
(kali@kali)~/Desktop/shiva
$ vi swap
(kali@kali)~/Desktop/shiva
$ cat swap
echo "Enter the value of x"
read x
echo "Enter the value of y"
read y
z=$x
x=$y
y=$z
echo "using third value will be x= $x y= $y"

echo "second method"
x=`expr $x + $y`
y=`expr $x - $y`
x=`expr $x - $y`
echo "Not using third value x = $x y = $y"

(kali@kali)~/Desktop/shiva
$ ./swap
Enter the value of x
32
Enter the value of y
25
using third value will be x= 25 y= 32
second method
Not using third value x = 32 y = 25

(kali@kali)~/Desktop/shiva
$
```

Q5. Input the basic salary of an employee from the user.

His HRA is 30% of his basic and DA is 20 % of basic. Medical Allowances 10%

Calculate his total salary

6000

1800

1200

600

9600

```
(kali㉿kali)-[~/Desktop/practice]
$ cat salary
echo "Enter the salary"
read s
hra=`echo $s \* 0.3|bc -l`
da=`echo $s \* 0.2|bc -l`
ma=`echo $s \* 0.1|bc -l`
total=`echo $s+$hra+$da+$ma|bc -l`
echo "TOTAL = $total"
```

```
(kali㉿kali)-[~/Desktop/practice]
$ ./salary
Enter the salary
6000
TOTAL = 9600.0
```

```
(kali㉿kali)-[~/Desktop/practice]
$
```