



SHELL PROGRAMMING LAB

ASSIGNMENT -5

SUBMITTED BY:

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EXPERIMENT – 5

TITLE: Working with expr command

Activities:

1. Write a shell script that defines variables like A=10 B=20 C=30 D=2 and perform the following operations:

- Add A & B and store the result in SumAB. Print SumAB.
- Multiply C & D and store the result in MulCD. Print MulCD
- Compare A & D and print the larger value.
- Compare B & C and print the lower value.

Ans.

```
GNU nano 6.0 Q1A.sh
#!/bin/bash
A=10
B=20
C=30
D=2

#A
SumAB=`expr $A + $B`
echo $SumAB

#B
MulCD=`expr $C \* $D`
echo $MulCD

#C
if [ $A -gt $D ]
then
    echo 'Larger value is ' $A
else
    echo 'Larger value is ' $D
fi

#D
if [ $B -gt $C ]
then
    echo 'Lower value is ' $C
else
    echo 'Lower value is ' $B
fi
```

```
root@Ayush500086400:~/Desktop/lab5# nano Q1A.sh
root@Ayush500086400:~/Desktop/lab5# ./Q1A.sh
30
60
Larger value is 10
Lower value is 20
root@Ayush500086400:~/Desktop/lab5#
```

2. Create a menu driven calculator script by getting the input from the user.

Ans.

```
GNU nano 6.0 Q2.sh
#!/bin/bash
sum=0
i="y"

while [ $i = "y" ]
do
read -p 'Enter first no.' n1
read -p 'Enter second no.' n2
echo "1.Addition"
echo "2.Subtraction"
echo "3.Multiplication"
echo "4.Division"
echo "Enter your choice"
read ch
case $ch in
1)sum=`expr $n1 + $n2`
echo "Sum ="$sum;;
2)sum=`expr $n1 - $n2`
echo "Sub ="$sum;;
3)sum=`expr $n1 \* $n2`
echo "Mul ="$sum;;
4)sum=`echo "scale=2;$n1/$n2"|bc`
echo "div=" $sum;;
*)echo "Invalid choice";;
esac
echo "Do u want to continue ?[y/n]"
read i
if [ $i != "y" ]
then
echo "Thank you"
exit
fi
done

[ Read 33 lines ]
^G Help      ^O Write Out  ^W Where Is   ^K Cut        ^T Execute    ^C Location
^X Exit      ^R Read File  ^\ Replace    ^U Paste      ^J Justify    ^_ Go To Line
```

```

root@Ayush500086400:~/Desktop/lab5# ./Q2.sh
Enter first no.10
Enter second no.2
1.Addition
2.Subtraction
3.Multiplication
4.Division
Enter your choice
4
div= 5.00
Do u want to continue ?[y/n]
y
Enter first no.20
Enter second no.3
1.Addition
2.Subtraction
3.Multiplication
4.Division
Enter your choice
4
div= 6.66
Do u want to continue ?[y/n]
n

```

3. List down the rules for creation of variables.

Ans.

The rules of creating the variables are:-

- 1.The variable name has lower case letters.
- 2.No dollar sign "\$" inserted while printing it.
- 3.Adding spaces after the initialization of the variable name and its value.
- 4.Start the variable name with a number, digit, or special symbols

4. Write a program to fetch the command line arguments.

Ans.

```

GNU nano 6.0      Q3.sh
#!/bin/bash
echo 'First Command line Argument ' $1
echo 'Second one' $2
echo "Total no. of command line argument " $#

```

```
root@Ayush500086400:~/Desktop/lab5# ./Q3.sh ayush 500086400
First Command line Argument  ayush
Second one 500086400
Total no. of command line argument  2
root@Ayush500086400:~/Desktop/lab5# S
```

5. Write a program to get user input of 2 numbers , add and display.
Ans.

```
GNU nano 6.0 Q4.sh
#!/bin/bash
read -p 'Enter First Number ' first
read -p 'Enter Second Number ' second
sum=`expr $first + $second`
echo "The First number is " $first " The second number is " $second " And the sum is "$sum
```

```
root@Ayush500086400:~/Desktop/lab5# ./Q4.sh
Enter First Number 2
Enter Second Number 3
The First number is  2  The second number is  3  And the sum is 5
```