OPEARTING SYSTEM

Experiment No. 05

AIM → Write a menu driven shell-script program to develop a Calculator.

Theory →

Approach for developing a calculator in shell-programming language →:

① first, we'll take input of two numbers.

② Input choice will be asked to the user as →
   ① Addition ② Substraction ③ Multiplication ④ Division.

③ Then further, we'll use Conditional statements to build the logic for the calculator as.

④ if choice equals to ①
   calculator res = a+b
   else if choice equals to ②
   calculator res = a-b
   else if choice equals to ③
   calculator res = a*b
   else if choice equals to ④
   calculator res = a/b.

⑤ Thus, we'll return Output as an Result by returning, res.

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Conclusion →

Thus, We Succesfully implemented a Shell-script for a menu driven calculator

Program code:

```bash
#!/bin/bash
clear
sum=0
i="y"
echo " Enter first  no."
read n
echo "Enter second no."
read n2
while [ $i = "y" ]
d
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
   exit
fi
done
```

Program Output:

```
 Enter first  no.
88
Enter second no.
99
1.Addition
2.Subtraction
3.Multiplication
4.Division
Enter your choice
1
Sum =187
Do u want to continue ?[y/n]
y
1.Addition
2.Subtraction
3.Multiplication
4.Division
Enter your choice
66
Invalid choice
Do u want to continue ?[y/n]
y
1.Addition
2.Subtraction
3.Multiplication
4.Division
Enter your choice
2
Sub = -11
Do u want to continue ?[y/n]
```

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