Shell Programming: Shell Scripts

Subject:- Unix Operating System

System Lab Class :- TYIT

Name	PRN
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Assignment No - 5a

Title-Write a program to implement a shell script for calculator

Objectives –

1. To learn shell programming and use it for write effective programs.
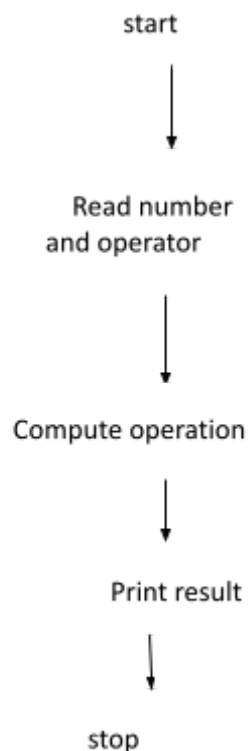
Theory-

A shell in a Linux operating system takes input from you in the form of commands, processes it, and then gives an output. It is the interface through which a user works on the programs, commands, and scripts. A shell is accessed by a terminal which runs it.

When you run the terminal, the Shell issues a command prompt (usually $), where you can type your input, which is then executed when you hit the Enter key. The output or the result is thereafter displayed on the terminal.

The Shell wraps around the delicate interior of an Operating system protecting it from accidental damage. Hence the name Shell.

Flowchart-

Program-

```
clear
sum=0
i=1
echo " Enter one no."
read n1
echo "Enter second no."
read n2
while [ $i = 1 ]
do
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 - $n2`
echo "Difference = "$sum;;
3)sum=`expr $n1 \* $n2`
echo "Product = "$sum;;
4)sum=`expr $n1 / $n2`
echo "Quotient = "$sum;;
*)echo "Invalid choice";;
esac
echo "Do you want to continue ?"
echo "1. Yes   2. No\n"
read i
if [ $i != 1 ]
then
echo "Thank you for using."
exit
fi
done
```

Output-

```
 Enter one no.
34
Enter second no.
44
1.Addition
2.Subtraction
3.Multiplication
4.Division
Enter your choice
1
Sum =78
Do you want to continue ?
1. Yes  2. No

1
1.Addition
2.Subtraction
3.Multiplication
4.Division
Enter your choice
2
Difference = -10
Do you want to continue ?
1. Yes  2. No

1
1.Addition
2.Subtraction
3.Multiplication
4.Division
Enter your choice
3
Product = 1496
Do you want to continue ?
1. Yes  2. No

1
1.Addition
2.Subtraction
3.Multiplication
4.Division
Enter your choice
4
Quotient = 0
Do you want to continue ?
1. Yes  2. No

2
Thank you for using.
```

Conclusion:

Calculator constructed using shell programming

References:

https://www.tutorialspoint.com/unix/unix-what-is-shell.html/