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Batch: F1

Subject: Operating System (OS)

Subject Code: 2CS506

Practical 2

1) Conditional Calculator

Shell script:

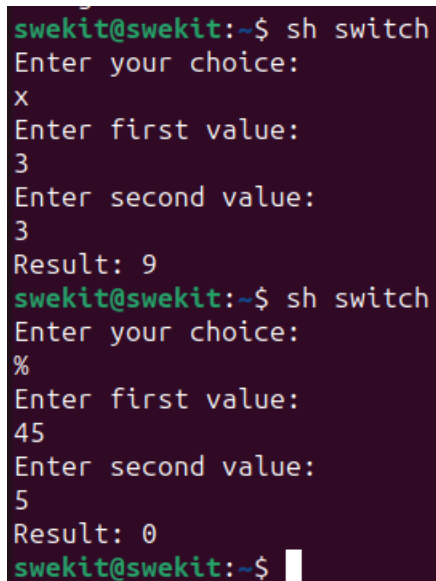
```
echo "Enter your choice";
read choice;
echo "Enter first value";
read a;
echo "Enter second value";
read b;
if [ "$choice" = "+" ];
then
    result=$(expr $a + $b)
elif [ "$choice" = "-" ];
then
    result=$(expr $a - $b)
elif [ "$choice" = "*" ];
then
    result=$(expr $a \* $b)
elif [ "$choice" = "/" ];
then
    result=$(expr $a / $b)
elif [ "$choice" = "%" ];
then
    result=$(expr $a % $b)
else
    echo "Wrong choice"
    exit 1
fi
echo "Result: $result";
```

```
swedit@swedit:~$ sh calc
Enter your choice
*
Enter first value
3
Enter second value
4
Result: 12
swedit@swedit:~$ sh calc
Enter your choice
+
Enter first value
4
Enter second value
4
Result: 8
swedit@swedit:~$ sh calc
Enter your choice
-
Enter first value
4
Enter second value
4
Result: 0
swedit@swedit:~$ sh calc
Enter your choice
/
Enter first value
5
Enter second value
5
Result: 1
```

2) Case Calculator

Shell Script:

```
echo "Enter your choice:";
read choice;
echo "Enter first value:";
read a;
echo "Enter second value:";
read b;
case $choice in
+) result=$(expr $a + $b);;
-) result=$(expr $a - $b);;
x) result=$(expr $a \* $b);;
/) result=$(expr $a / $b);;
%) result=$(expr $a % $b);;
*) echo "Wrong choice"; exit 1;;
esac
echo "Result: $result";
```



A terminal window showing the execution of the shell script. The prompt is `swekit@swekit:~$`. The user enters `sh switch`. The script prompts for a choice, then two values. In the first run, the choice is `x`, the first value is `3`, and the second value is `3`, resulting in `Result: 9`. In the second run, the choice is `%`, the first value is `45`, and the second value is `5`, resulting in `Result: 0`. The prompt returns to `swekit@swekit:~$`.

```
swekit@swekit:~$ sh switch
Enter your choice:
x
Enter first value:
3
Enter second value:
3
Result: 9
swekit@swekit:~$ sh switch
Enter your choice:
%
Enter first value:
45
Enter second value:
5
Result: 0
swekit@swekit:~$
```