Lab 09 Tasks

Operating System

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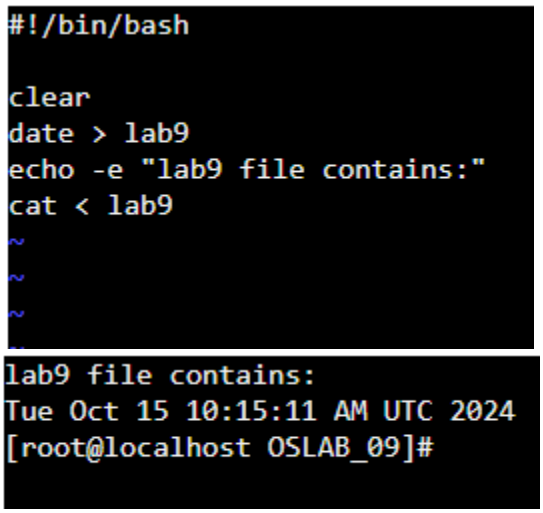
Q1.

Run following script. And examine output.

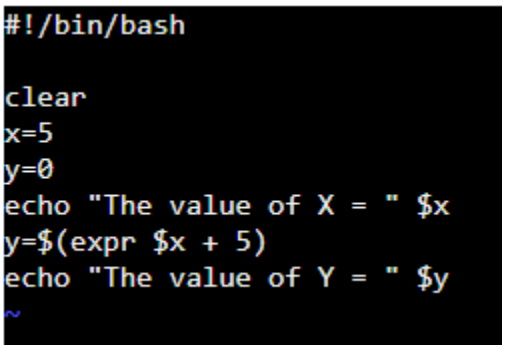
```
#!/bin/sh
clear
date > lab9
echo -e "lab9 file contains:"
cat < lab9
```



Q2.

A file contains following script. Execute this code

```
#!/bin/sh
clear
x=5
y=0
echo "The value of X = " $x
y=$(expr $x + 5)
echo "The value of Y = " $y
```



```
"task2.sh" [New] 8L, 100B written
[root@localhost OSLAB_09]# chmod 777 task2.sh
[root@localhost OSLAB_09]# ./task2.sh
The value of X =  5
The value of Y =  10
[root@localhost OSLAB_09]#
```

Q3.

Write shell script that reads 2 integer values from user and print their sum on screen.

```
#!/bin/bash

echo "Enter first integer: "
read num1
echo "Enter second integer: "
read num2
sum=$(expr $num1 + $num2)
echo "The sum is: " $sum
```

```
"task3.sh" [New] 8L, 143B written
[root@localhost OSLAB_09]# chmod 777 task3.sh
[root@localhost OSLAB_09]# ./task3.sh
Enter first integer:
7
Enter second integer:
8
The sum is:  15
[root@localhost OSLAB_09]#
```

Q4.

Write shell script that takes string from user, and make folder with named with string. Folder should contain file with named timestamp. Having current time and date written on it.

```
#!/bin/bash

echo "Enter folder name: "
read folder_name
mkdir $folder_name
timestamp=$(date)
echo $timestamp > $folder_name/timestamp.txt
echo "Folder '$folder_name' and file 'timestamp.txt' created"
```

```
"task4.sh" [New] 9L, 202B written
[root@localhost OSLAB_09]# chmod 777 task4.sh
[root@localhost OSLAB_09]# ./task4.sh
Enter folder name:
Dua
Folder 'Dua' and file 'timestamp.txt' created
[root@localhost OSLAB_09]#
```

Q5.

Write a shell script to get the total count of the word “Linux” in all the “.txt” files and also across files present in subdirectories.

```
#!bin/bash
grep -rwo "Linux" --include="*.txt" . | wc -l
~
```

```
"task5.sh" 2L, 59B written
[root@localhost OSLAB_09]# chmod 777 task5.sh
[root@localhost OSLAB_09]# ./task5.sh
0
[root@localhost OSLAB_09]#
```

Q6.

Write shell script that defines 2 integers and one float value like

a=5
b=7
c=5.5

Perform multiplication of integers then divide with float.

and finally print result with four decimal places. like 6.3636

you have to use pipe operator (|) to send variables to bc utility for arithmetic.

```
#!/bin/bash

a=5
b=7
c=5.5
result=$(echo "scale=4; ($a * $b) / $c" | bc)
echo "The result is: " $result
```

```
"task6.sh" [New] 7L, 104B written
[root@localhost OSLAB_09]# chmod 777 task6.sh
[root@localhost OSLAB_09]# ./task6.sh
The result is:  6.3636
[root@localhost OSLAB_09]#
```