

OS-LAB 2

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TASK 1

```
devil@Devil: ~/os_lab/lab2$ cat task1.sh
dls=task5.sh

if [ -f "$dls" ]
then
    echo "Sdls passowrds are enabled"
    if [ -w "$dls" ]
    then
        echo "you have permission to edit $dls"
    else
        echo "you do NOT have permtssions to edit $dls"
    fi
else
    echo "$dls File does not exist"
fi

devil@Devil: ~/os_lab/lab2$ ./task1.sh
task5.sh passwords are enabled
you have permission to edit task5.sh
devil@Devil: ~/os_lab/lab2$
```

TASK 2

```
devil@Devil: ~/os_lab/lab2$ cat task2.sh
file=test.sh
read -p "Enter the word " word
echo "File before removing $word"
cat $file
grep -v -l $word $file > test
mv test $file
echo "file after removing $word"
cat $file
devil@Devil: ~/os_lab/lab2$ ./task2.sh
Enter the word echo
file before removing echo
echo "hello world"
echo "I am a student"
a=10
if [ a == 10 ]
then
    echo "a is equal to 10"
else
    echo "a is not equal to 10"
fi

file after removing echo
a=10
if [ a == 10 ]
then
    echo "a is equal to 10"
else
    echo "a is not equal to 10"
fi
devil@Devil: ~/os_lab/lab2$
```

TASK 3

```
devil@Devil: ~/os_lab/lab2
read -p "Enter the file name or directory name " file
if [[ -d $file ]]
then
    echo "$file is a directory"
elif [[ -f $file ]]
then
    echo "$file is a regular file"
else
    echo "$file is an another type of file"
fi

devil@Devil: ~/os_lab/lab2$ ./task3.sh
Enter the file name or directory name test
test is a directory
devil@Devil: ~/os_lab/lab2$ ls
0 task1.sh task2.sh task3.sh task5.sh task7.sh test test.sh
devil@Devil: ~/os_lab/lab2$
```

TASK 4

```
devil@Devil: ~/os_lab/lab2
cat /etc/shadow
if [[ $? == 0 ]]
then
    echo "Command Succeeded"
    exit 0
else
    echo "Command Failed"
    exit 1
fi

devil@Devil: ~/os_lab/lab2$ ./task4.sh
cat: /etc/shadow: Permission denied
Command Failed
devil@Devil: ~/os_lab/lab2$
```

TASK 5

```
devil@Devil: ~/os_lab/lab2
devil@Devil:~/os_lab/lab2$ cat task5.sh
read -p "Enter the number to find its factorial " num
while [ $num -lt 0 ]
do
    read -p "Negative number not accepted " num
done
if [ $num == 0 ]
then
    echo "Factorial of number is 1"
else
    for ((l=num ; l>=1 ; l--))
    do
        num=$((num * l))
    done
    echo "Factorial of number is $num"
fi

devil@Devil:~/os_lab/lab2$ ./task5.sh
Enter the number to find its factorial 5
Factorial of number is 120
devil@Devil:~/os_lab/lab2$
```

TASK 6

```
devil@Devil: ~/os_lab/lab2
devil@Devil:~/os_lab/lab2$ cat task6.sh
function file_count()
{
    local no_file=$(ls -l | wc -l)
    echo "Number of files in the directory is $no_file"
}

file_count
devil@Devil:~/os_lab/lab2$ ./task6.sh
Number of files in the directory is 11
devil@Devil:~/os_lab/lab2$
```

TASK 7

```
devil@Devil: ~/os_lab/lab2
devil@Devil:~/os_lab/lab2$ cat task7.sh
read -p "Enter the Height : " height
read -p "Enter the breadth : " breadth
read -p "Enter the length : " length

area_tri=$((breadth*height/2))
area_sq=$((length*length))
area_rec=$((length*breadth))

echo "Area of triangle is $area_tri cm^2"
echo "Area of square is $area_sq cm^2"
echo "Area of rectangle is $area_rec cm^2"

devil@Devil:~/os_lab/lab2$ ./task7.sh
Enter the Height :20
Enter the breadth :20
Enter the length :20
Area of triangle is 200 cm^2
Area of square is 400 cm^2
Area of rectangle is 400 cm^2
devil@Devil:~/os_lab/lab2$
```