

OS LAB 03 Tasks

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ROII NUmber: 24k-0737

Task 01:

```
yash-raj@yash-raj-VirtualBox: ~/Lab03
yash-raj@yash-raj-VirtualBox:~$ pwd
/home/yash-raj
yash-raj@yash-raj-VirtualBox:~$ ls
Desktop  Downloads  Music      Pictures  snap      Videos
Documents  Lab03      OS_Lab_24k-0737  Public    Templates
yash-raj@yash-raj-VirtualBox:~$ cd Lab03
yash-raj@yash-raj-VirtualBox:~/Lab03$ nano yash.sh
yash-raj@yash-raj-VirtualBox:~/Lab03$ echo $SHELL
/bin/bash
```

```
yash-raj@yash-raj-VirtualBox: ~/Lab03
GNU nano 7.2 yash.sh
#!/bin/bash
#System is using bash Linux Shell
echo "Hello Linux"
echo "Hello YashRaj"
```

```
yash-raj@yash-raj-VirtualBox: ~/Lab03
yash-raj@yash-raj-VirtualBox:~/Lab03$ nano yash.sh
yash-raj@yash-raj-VirtualBox:~/Lab03$ chmod +x yash.sh
yash-raj@yash-raj-VirtualBox:~/Lab03$ ./yash.sh
Hello Linux
Hello YashRaj
```

Task 02:



```
yash-raj@yash-raj-VirtualBox:~$ nano yash.sh
yash-raj@yash-raj-VirtualBox:~$ chmod +x yash.sh
yash-raj@yash-raj-VirtualBox:~$ ./yash.sh
```

GNU nano 7.2

```
echo "Strings And Integer Before :"  
echo "Name: $Name"  
echo "Integer: $Integer"  
echo "Full Name: $Full_Name"  
echo  
echo "String And Integer After Modifying: "  
Name="Saad"  
Full_Name="Saad Aamer"  
Integer=$((Integer+3))  
echo "Name: $Name"  
echo "Integer: $Integer"  
echo "Full Name: $Full_Name"  
echo
```

```
#Array Declaration#  
myArray=("Saad" 22 10.0 "Hello Sir" "Mubashir")  
echo "Normal Printing :"  
echo "${myArray[@]}"  
echo  
echo "Individual Printing:"  
#Individual Printing#  
echo "${myArray[0]}"  
echo "${myArray[1]}"  
echo "${myArray[2]}"  
echo "${myArray[3]}"  
echo "${myArray[4]}"  
echo "${myArray[5]}"  
echo  
echo "Array AFTer Updation: "  
myArray+=("Sir Abdullah" "Shikarpur" "Sukkur IBA")  
echo "${myArray[@]}"
```

Task 03:

```
GNU nano 7.2 yash.sh
echo "Enter your name : "
read name

echo "Enter your favorite color: "
read color

echo "Hello $name, your favorite color is: $color"

echo "Length of your name is: ${#name}"

echo "First Three letters of the color is:${color:0:3}"

pre_defined="Blue"
if [ "$color" == "$pre_defined" ]; then
    echo "your color and predefined color is same"
else
    echo "your favorite color doesn't matches with pre-defined color"
fi
```

Matched Condition:

```
yash-raj@yash-raj-VirtualBox:~$ nano yash.sh
yash-raj@yash-raj-VirtualBox:~$ ./yash.sh
Enter your name :
Yash
Enter your favorite color:
Blue
Hello Yash, your favorite color is: Blue
Length of your name is: 4
First Three letters of the color is:Blu
your color and predefined color is same
```

Not Matched Condition:

```
yash-raj@yash-raj-VirtualBox:~$ ./yash.sh
Enter your name :
Yash
Enter your favorite color:
Yellow
Hello Yash, your favorite color is: Yellow
Length of your name is: 4
First Three letters of the color is:Yel
your favorite color doesn't matches with pre-defined color
yash-raj@yash-raj-VirtualBox:~$
```

Task 04:

```
GNU nano 7.2                                yash.sh
echo "Enter First Integer :"
read int1
echo "Enter Second Integer :"
read int2

echo "Addition of two numbers : $((int1+int2))"
echo "Subtraction of two numbers : $((int1-int2))"
echo "Multiplication of two numbers : $((int1*int2))"
echo "Division of two numbers : $((int1/ int2))"
echo "Modulus of two numbers : $((int1 % int2))"

if [ "$int1" -gt "$int2" ]; then
    echo "Number 1 is greater than Number 2"
elif [ "$int1" -lt "$int2" ]; then
    echo "Number 2 is greater than Number 1"
else
    echo "Number is equal to zero"
fi
```

```
yash-raj@yash-raj-VirtualBox:~$ nano yash.sh
yash-raj@yash-raj-VirtualBox:~$ ./yash.sh
Enter First Integer :
20
Enter Second Integer :
12
Addition of two numbers : 32
Subtraction of two numbers : 8
Multiplication of two numbers : 240
Division of two numbers : 1
Modulus of two numbers : 8
Number 1 is greater than Number 2
yash-raj@yash-raj-VirtualBox:~$
```

Task 05:

```
GNU nano 7.2
echo "Choose an option: "
echo "a =Show Date"
echo "b = List files"
echo "c = Show Current Working Directory"
echo "d = Exit"

read choice
case $choice in
    a) date;;
    b) ls;;
    c) pwd;;
    d) exit;;
    *) echo "Not Valid Choice"
esac
```

```
yash-raj@yash-raj-VirtualBox:~$ ./yash.sh
bash: ./yash.sh: Permission denied
yash-raj@yash-raj-VirtualBox:~$ chmod +x yash.sh
yash-raj@yash-raj-VirtualBox:~$ ./yash.sh
Choose an option:
a =Show Date
b = List files
c = Show Current Working Directory
d = Exit
a
Wed Feb 11 12:32:17 AM PKT 2026
yash-raj@yash-raj-VirtualBox:~$ ./yash.sh
Choose an option:
a =Show Date
b = List files
c = Show Current Working Directory
d = Exit
b
Desktop    Downloads  Music          Pictures  snap        Videos
Documents  Lab03      OS_Lab_24k-0737 Public    Templates  yash.sh
yash-raj@yash-raj-VirtualBox:~$ ./yash.sh
Choose an option:
a =Show Date
b = List files
c = Show Current Working Directory
d = Exit
c
/home/yash-raj
```

```
/home/yash-raj
```

```
yash-raj@yash-raj-VirtualBox:~$ ./yash.sh
```

```
Choose an option:
```

```
a =Show Date
```

```
b = List files
```

```
c = Show Current Working Directory
```

```
d = Exit
```

```
d
```