

OS LAB 03 Tasks

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ROll NUmber: 24k-0737

Task 01:

```
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
```

```
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$ 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/yashraj  
yash-raj@yash-raj-VirtualBox:~/
```

Choose an option:
a =Show Date
b = List files
c = Show Current Working Directory
d = Exit
d