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**Course: Operating System**

<p align="center"><b>Lab-Task-09</b></p>

**Comments Task01:**

```
Hamza@Ubuntu:~$ touch lab9.sh
Hamza@Ubuntu:~$ cat>lab9.sh
echo"welcome to shell scripting"
echo"this is lab 09"
Hamza@Ubuntu:~$ chmod u+x lab9.sh
Hamza@Ubuntu:~$ ./lab9.sh
./lab9.sh: line 1: echowelcome to shell scripting: command not found
./lab9.sh: line 2: echothis is lab 09: command not found
Hamza@Ubuntu:~$ 
```

**Comment Task01-2:**

```
Hamza@Ubuntu:~$ cat>>lab9.sh
#this is comment line
#task2
date #it will show todays date
echo #"Welcome to lab9" #it will message on your screen
Hamza@Ubuntu:~$ ./lab9.sh
./lab9.sh: line 1: echowelcome to shell scripting: command not found
./lab9.sh: line 2: echothis is lab 09: command not found
Mon Oct 20 03:36:02 AM UTC 2025
Welcome to lab9
Mon Oct 20 03:36:03 AM UTC 2025
```

**Task Multi-Comments:**

```
Hamza@Ubuntu:~$ cat>>lab9.sh
#this is multiple comment lines
#task 2
date #it will show today date
echo "This is double line comments lines code of lab9" #it will message on your
screen
<<comment
This is lab9 task
This is multiline comments
comment
echo "My name is Hamza Rahim" #it will message on your screen
Hamza@Ubuntu:~$ ./lab9.sh
./lab9.sh: line 1: echowelcome to shell scripting: command not found
./lab9.sh: line 2: echothis is lab 09: command not found
Mon Oct 20 03:48:22 AM UTC 2025
Welcome to lab9
Mon Oct 20 03:48:22 AM UTC 2025

Mon Oct 20 03:48:22 AM UTC 2025
This is double line comments lines code of lab9
My name is Hamza Rahim
```

**Task Comments04:**

```
Hamza@Ubuntu:~$ cat>lab9.sh
#!/bin/sh

date # todays date
echo -r "this is lab9 by using magic command " #message
cat<lab9.sh #print the code of this file
Hamza@Ubuntu:~$ ./lab9.sh
Mon Oct 20 04:04:36 AM UTC 2025
-r this is lab9 by using magic command
#!/bin/sh

date # todays date
echo -r "this is lab9 by using magic command " #message
cat<lab9.sh #print the code of this file
```

**Task 05:**

```
Hamza@Ubuntu:~$ cat>>lab9.sh
#!/bin/sh
x=5
y-0
echo "The value of x="$x
y=$(expr $x+5)
echo "The value of y="$y
```

```
Hamza@Ubuntu:~$ ./lab9.sh
Mon Oct 20 04:19:27 AM UTC 2025
-r this is lab9 by using magic command
#!/bin/sh

date # todays date
echo -r "this is lab9 by using magic command " #message
cat<lab9.sh #print the code of this file
#!/bin/sh
x=5
y-0
echo "The value of x="$x
y=$(expr $x+5)
echo "The value of y="$y
./lab9.sh: 8: y-0: not found
The value of x=5
The value of y=5+5
```

**Task 06:**

```
Hamza@Ubuntu:~$ bc
bc 1.07.1
Copyright 1991-1994, 1997, 1998, 2000, 2004, 2006, 2008, 2012-2017 Free Software
 Foundation, Inc.
This is free software with ABSOLUTELY NO WARRANTY.
For details type `warranty'.
2+5
7
2.5544*344.33
879.5565
15/7
2
15/2
7
scale=3
15/2
7.500
```

**Task 08:**

```
Hamza@Ubuntu:~$ touch lab09.sh
Hamza@Ubuntu:~$ cat>>lab09.sh
#!/bin/bash

# Read the first integer
read -p "Enter first integer: " num1

# Read the second integer
read -p "Enter second integer: " num2

# Calculate the sum
sum=$((num1 + num2))

# Print the result
echo "The sum of $num1 and $num2 is: $sum"
Hamza@Ubuntu:~$ ./lab09.sh
bash: ./lab09.sh: Permission denied
Hamza@Ubuntu:~$ chmod u+x lab09.sh
Hamza@Ubuntu:~$ ./lab09.sh
Enter first integer: 1
Enter second integer: 2
The sum of 1 and 2 is: 3
Hamza@Ubuntu:~$
```

**Task10:**

```
Hamza@Ubuntu:~$ cat>>lab09.sh
#!/bin/bash

# Define variables
a=5
b=7
c=5.5

# Perform calculation: (a * b) / c using bc via pipe
echo "scale=4; ($a * $b) / $c" | bc
Hamza@Ubuntu:~$ ./lab09.sh
Enter first integer: 23
Enter second integer: 43
The sum of 23 and 43 is: 66
6.3636
```

**Task11:**

```
Hamza@Ubuntu:~$ touch task7.sh
Hamza@Ubuntu:~$ chmod u+x task7.sh
Hamza@Ubuntu:~$ cat>task7.sh
echo "Enter Folder Name "
read folder_name
mkdir -p "$folder_name"
timestamp=$(date+"%Y%m%d_%H%M%S")
file_path="$folder_name/$timestamp.txt"
current_date=$(date)
echo "Folder name :$folder_name">"$file_path"
echo "Current date: $current_date">> "$file_path"
echo "Folder '$folder_name' creat with file '$timestamp.txt' inside."
Hamza@Ubuntu:~$ ./task7.sh
Enter Folder Name
hamza
./task7.sh: line 4: date+%Y%m%d_%H%M%S: command not found
Folder 'hamza' creat with file '.txt' inside.
Hamza@Ubuntu:~$
```