

Bash Assignment

1. Arithmetic operations :

Code :

```
GNU nano 7.2 bashscript1.sh
#!/bin/bash
x=12
y=15
echo "x=8, y=2"
echo "Addition of x & y"
echo $(( x + y ))
echo "Subtraction of x & y"
echo $(( x - y ))
echo "Multiplication of x & y"
echo $(( x * y ))
echo "Division of x by y"
echo $(( x / y ))
echo "Exponentiation of x,y"
echo $(( x ** y ))
echo "Modular Division of x,y"
echo $(( x % y ))
echo "Incrementing x by 5, then x="
(( x += 5 ))
echo $x
echo "Decrementing x by 5, then x="
(( x -= 5 ))
echo $x
echo "Multiply of x by 5, then x="
(( x *= 5 ))
echo $x
echo "Dividing x by 5, x="
(( x /= 5 ))
echo $x
echo "Remainder of Dividing x by 5, x="
(( x %= 5 ))
echo $x
```

Output :

```
huthin@4f7e8c7e4ccb5e3: ~/bashscripts
4
Exponentiation of x,y
64
Modular Division of x,y
6
Incrementing x by 5, then x=
15
Decrementing x by 5, then x=
8
Multiply of x by 5, then x=
40
Dividing x by 5, x=
8
Remainder of Dividing x by 5, x=
3
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano bashscript1.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./bashscript1.sh
x=8, y=2
Addition of x & y
27
Subtraction of x & y
-3
Multiplication of x & y
180
Division of x by y
8
Exponentiation of x,y
15407021574586368
Modular Division of x,y
12
Incrementing x by 5, then x=
17
Decrementing x by 5, then x=
12
Multiply of x by 5, then x=
60
Dividing x by 5, x=
12
Remainder of Dividing x by 5, x=
2
huthin@4f7e8c7e4ccb5e3:~/bashscripts$
```

2. Expr

Code :

```
GNU nano 7.2 exprparth.sh
#!/bin/bash
# Basic arithmetic using expr

echo "a=10, b=3"
echo "c is the value of addition c=a+b"
a=10
b=3
echo "c= `expr $a + $b`"
```

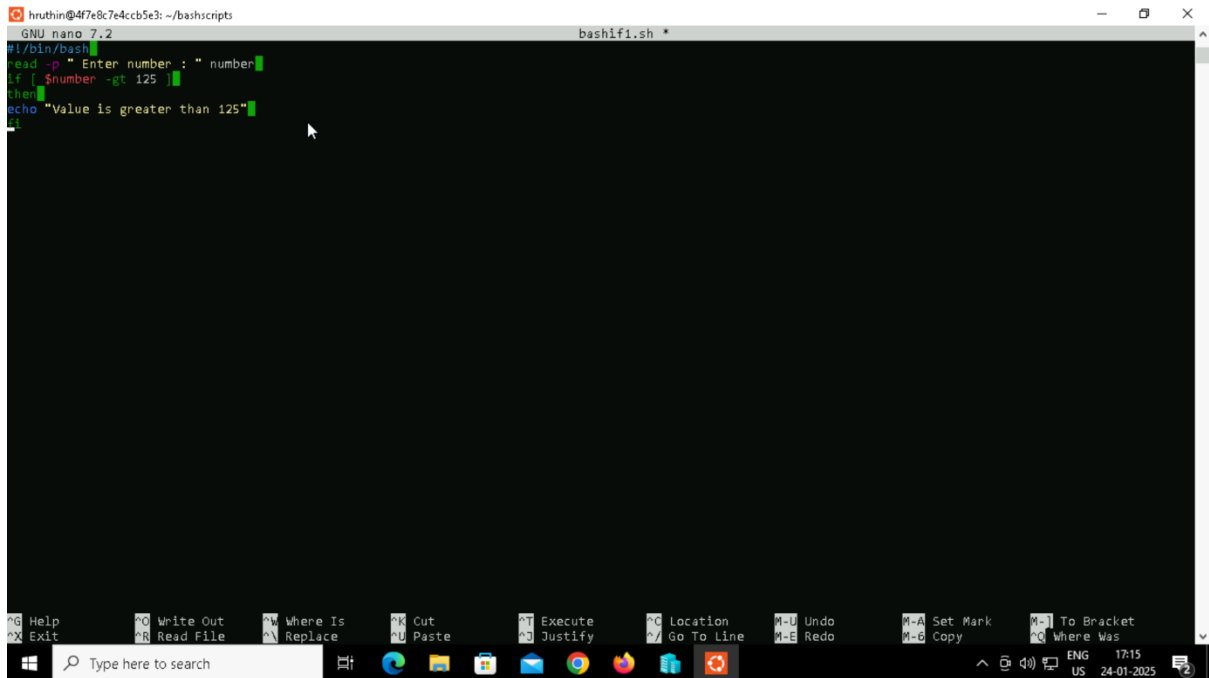
Output :

```
3
Multiplication of x & y
480
Division of x by y
8
Exponentiation of x,y
15407021574506368
Modular Division of x,y
12
Incrementing x by 5, then x=
17
Decrementing x by 5, then x=
12
Multiply of x by 5, then x=
60
Dividing x by 5, x=
12
Remainder of Dividing x by 5, x=
2
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano exprparth.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x exprparth.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./exprparth.sh
a=10, b=3
c is the value of addition c=a+b
c= 13
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$
```

Bash If :

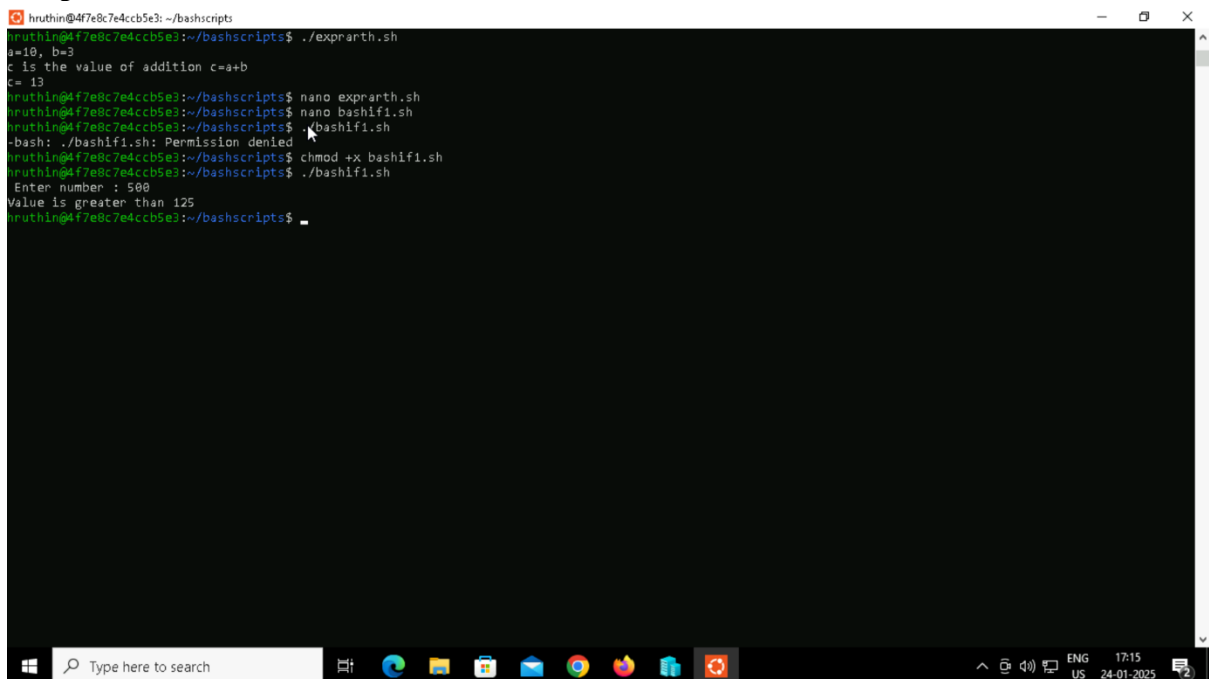
Example 1: In this example, take a user-input of any number and check if the value is greater than 125.

Code :



```
huthin@4f7e8c7e4ccb5e3: ~/bashscripts
GNU nano 7.2 bashif1.sh
#!/bin/bash
read -p "Enter number : " number
if [ $number -gt 125 ]
then
echo "Value is greater than 125"
fi
```

Output :



```
huthin@4f7e8c7e4ccb5e3: ~/bashscripts
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./exparth.sh
a=10, b=3
c is the value of addition c=a+b
c= 13
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano exprarth.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano bashif1.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./bashif1.sh
-bash: ./bashif1.sh: Permission denied
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x bashif1.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./bashif1.sh
Enter number : 500
Value is greater than 125
huthin@4f7e8c7e4ccb5e3:~/bashscripts$
```

Example 2 In this example, we demonstrate the usage of if statement with a simple scenario of comparing two strings:

Code :

```
huthin@4f7e8c7e4ccb5e3: ~/bashscripts
GNU nano 7.2 bashif2.sh
#!/bin/bash
# if condition is true
if [ "myfile" == "myfile" ];
then
echo "true condition"
fi
# if condition is false
if [ "myfile" == "yourfile" ];
then
echo "false condition"
fi
```

Output :

```
huthin@4f7e8c7e4ccb5e3: ~/bashscripts
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./exprarth.sh
a=10, b=3
c is the value of addition c=a+b
c= 13
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano exprarth.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano bashif1.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./bashif1.sh
-bash: ./bashif1.sh: Permission denied
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x bashif1.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./bashif1.sh
Enter number : 500
Value is greater than 125
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano bashif2.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x bashif2.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./bashif2.sh
true condition
huthin@4f7e8c7e4ccb5e3:~/bashscripts$
```

Example 3 In this example, we demonstrate how to compare numbers by using the if statement:

Code :

```
GNU nano 7.2 bashif3.sh
#!/bin/bash

#if condition (greater than) is true
if [ 10 -gt 3 ];
then
echo "10 is greater than 3."
fi

#if condition (greater than) is false
if [ 3 -gt 10 ];
then
echo "3 is not greater than 10."
fi

#if condition (less than) is true
if [ 3 -lt 10 ];
then
echo "3 is less than 10."
fi

#if condition (less than) is false
if [ 10 -lt 3 ];
then
echo "10 is not less than 3."
fi

#if condition (equal to) is true
if [ 10 -eq 10 ];
then
echo "10 is equal to 10."
fi

#if condition (equal to) is false
if [ 10 -eq 9 ];
then
echo "10 is not equal to 9"
fi
```

Output :

```
hruthin@4f7e8c7e4ccb5e3: ~/bashscripts
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./exprarth.sh
a=10, b=3
c is the value of addition c=a+b
c= 13
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano exprarth.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano bashif1.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./bashif1.sh
-bash: ./bashif1.sh: Permission denied
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x bashif1.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./bashif1.sh
Enter number : 500
Value is greater than 125
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano bashif2.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x bashif2.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./bashif2.sh
true condition
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano bashif3.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x bashif3.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./bashif3.sh
10 is greater than 3.
3 is less than 10.
10 is equal to 10.
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$
```

Example 4 In this example, we will define how to use AND operator to include multiple conditions in the if expression:

Code :

```
huthin@4f7e8c7e4ccb5e3: ~/bashscripts
GNU nano 7.2 bashif4.sh *
#!/bin/bash

# TRUE && TRUE
if [ 8 -gt 6 ] && [ 10 -eq 10 ]; then
    echo "Conditions are true"
fi

# TRUE && FALSE
if [ "mylife" == "mylife" ] && [ 3 -gt 10 ]; then
    echo "Conditions are false"
fi
```

Output :

```
huthin@4f7e8c7e4ccb5e3: ~/bashscripts
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./exprarth.sh
a=10, b=3
c is the value of addition c=a+b
c= 13
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano exprarth.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano bashif1.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./bashif1.sh
-bash: ./bashif1.sh: Permission denied
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x bashif1.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./bashif1.sh
Enter number : 500
Value is greater than 125
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano bashif2.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x bashif2.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./bashif2.sh
true condition
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano bashif3.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano bashif3.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x bashif3.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./bashif3.sh
10 is greater than 3.
5 is less than 10.
10 is equal to 10.
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano bashif4.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x bashif4.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./bashif4.sh
Conditions are true
huthin@4f7e8c7e4ccb5e3:~/bashscripts$
```

Example 5 In this example, we will define how to use OR operator to include multiple conditions in the if expression:

Code :

```
hrruthin@4f7e8c7e4ccb5e3: ~/bashscripts
GNU nano 7.2 bashif5.sh
#!/bin/bash

# TRUE || FALSE
if [ 8 -gt 7 ] || [ 10 -eq 3 ];
then
echo "Condition is true."
fi

# FALSE || FALSE
if [ "mylife" == "yourlife" ] || [ 3 -gt 10 ];
then
echo "Condition is false."
fi
```

Output :

```
hrruthin@4f7e8c7e4ccb5e3: ~/bashscripts
hrruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./exprarth.sh
a=10, b=3
c is the value of addition c=a+b
c= 13
hrruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano exprarth.sh
hrruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano bashif1.sh
hrruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./bashif1.sh
-bash: ./bashif1.sh: Permission denied
hrruthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x bashif1.sh
hrruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./bashif1.sh
Enter number : 500
Value is greater than 125
hrruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano bashif2.sh
hrruthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x bashif2.sh
hrruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./bashif2.sh
true condition
hrruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano bashif3.sh
hrruthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x bashif3.sh
hrruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./bashif3.sh
10 is greater than 3.
5 is less than 10.
10 is equal to 10.
hrruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano bashif4.sh
hrruthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x bashif4.sh
hrruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./bashif4.sh
Conditions are true
hrruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano bashif5.sh
hrruthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x bashif5.sh
hrruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./bashif5.sh
Condition is true.
hrruthin@4f7e8c7e4ccb5e3:~/bashscripts$
```

Example 6 In this example, we will define how to use AND and OR to include multiple conditions in the if expression:

Code :

```
huthin@4f7e8c7e4ccb5e3: ~/bashscripts
GNU nano 7.2 bashif6.sh
#!/bin/bash

# TRUE && FALSE || FALSE || TRUE
if [[ 10 -eq 10 && 5 -gt 4 || 3 -eq 4 || 3 -lt 6 ]]; then
    echo "Condition is true."
fi

# TRUE && FALSE || FALSE
if [[ 8 -eq 8 && 8 -gt 10 || 0 -lt 5 ]]; then
    echo "Condition is false"
fi
```

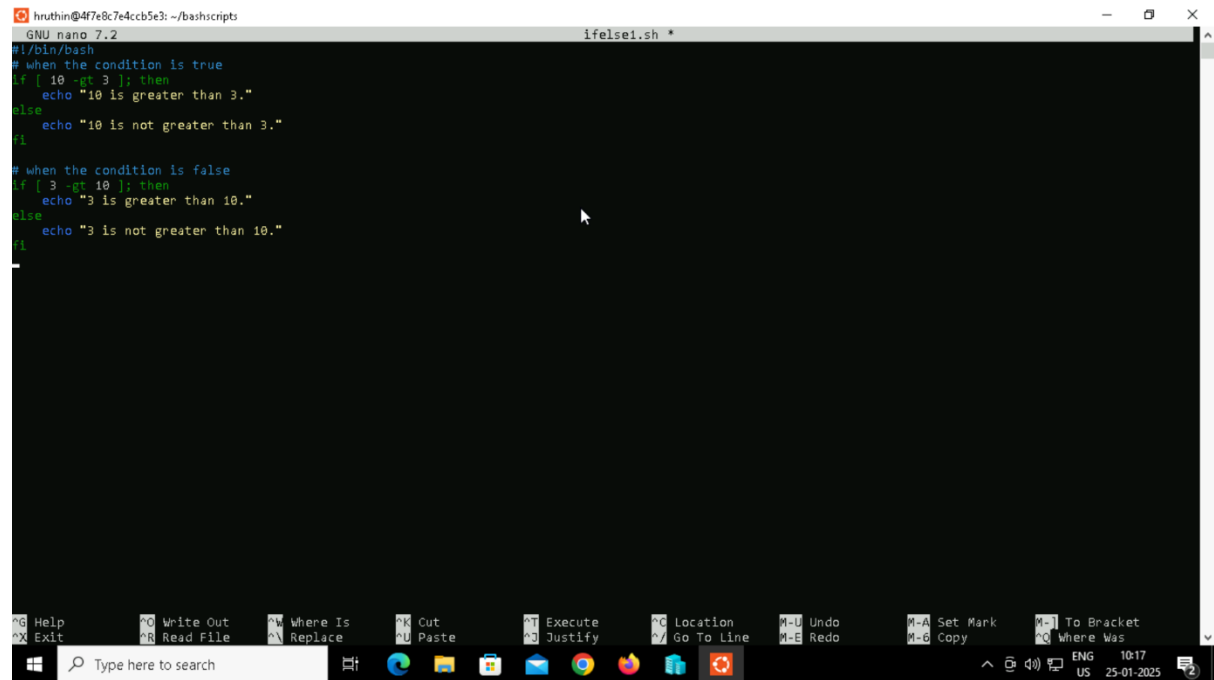
Output:

```
huthin@4f7e8c7e4ccb5e3: ~/bashscripts
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./exprarth.sh
a=10, b=3
c is the value of addition c=a+b
c= 13
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano exprarth.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano bashif1.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./bashif1.sh
-bash: ./bashif1.sh: Permission denied
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x bashif1.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./bashif1.sh
Enter number : 500
Value is greater than 125
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano bashif2.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x bashif2.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./bashif2.sh
true condition
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano bashif3.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x bashif3.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./bashif3.sh
10 is greater than 3.
5 is less than 10.
10 is equal to 10.
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano bashif4.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x bashif4.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./bashif4.sh
Conditions are true
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano bashif5.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x bashif5.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./bashif5.sh
Condition is true.
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano bashif6.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x bashif6.sh
huthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./bashif6.sh
Condition is true.
huthin@4f7e8c7e4ccb5e3:~/bashscripts$
```


BASH IF ELSE:

Example 1 Following example consists of two different scenarios where in the first if-else statement, the condition is true, and in the second if-else statement, the condition is false.

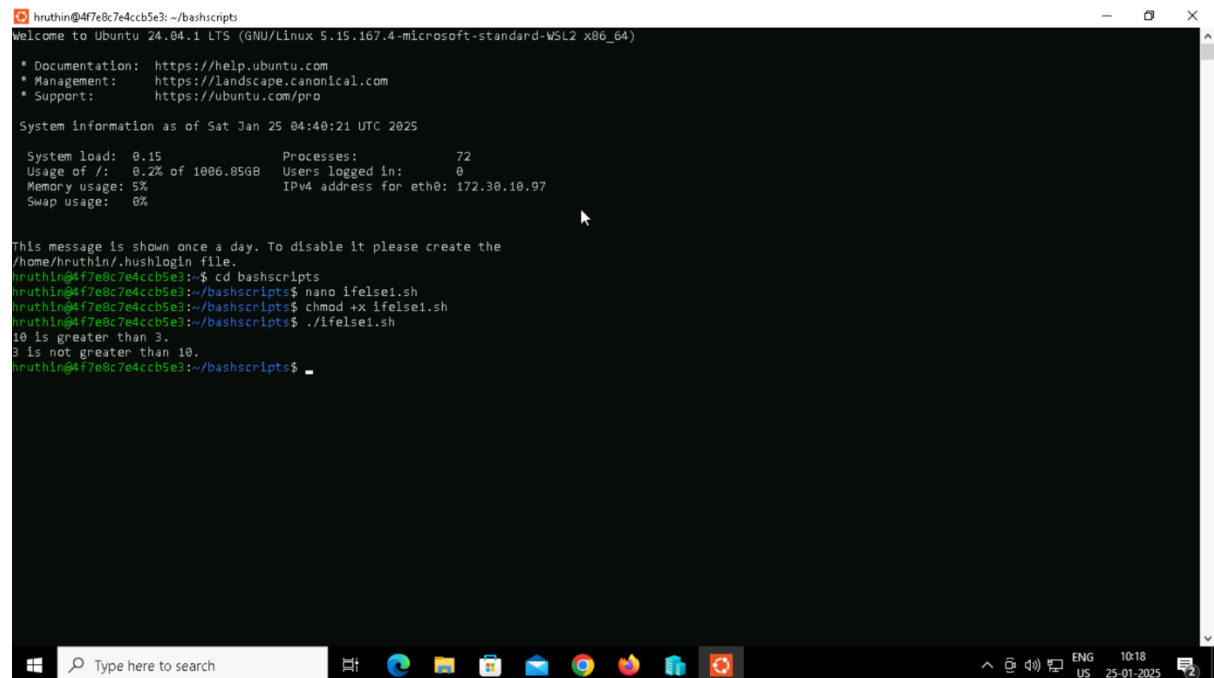
Code :



```
GNU nano 7.2 ifelse1.sh
#!/bin/bash
# when the condition is true
if [ 10 -gt 3 ]; then
    echo "10 is greater than 3."
else
    echo "10 is not greater than 3."
fi

# when the condition is false
if [ 3 -gt 10 ]; then
    echo "3 is greater than 10."
else
    echo "3 is not greater than 10."
fi
```

Output :



```
hruthin@4f7e8c7e4ccb5e3: ~/bashscripts
Welcome to Ubuntu 24.04.1 LTS (GNU/Linux 5.15.167.4-microsoft-standard-WSL2 x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro

System information as of Sat Jan 25 04:40:21 UTC 2025

System load:  0.15           Processes:           72
Usage of /:   0.2% of 1006.85GB Users logged in:          0
Memory usage: 5%            IPv4 address for eth0: 172.30.10.97
Swap usage:   0%

This message is shown once a day. To disable it please create the
/home/hruthin/.hushlogin file.
hruthin@4f7e8c7e4ccb5e3:~$ cd bashscripts
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano ifelse1.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x ifelse1.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./ifelse1.sh
10 is greater than 3.
3 is not greater than 10.
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$
```

Example 2 In this example, we explained how to use multiple conditions with the if-else statement in Bash. We use bash logical operators to join multiple conditions

Code :

```
GNU nano 7.2 ifelse2.sh
#!/bin/bash
# When condition is true
# TRUE && FALSE || FALSE || TRUE
if [[ 10 -gt 9 && 10 == 9 || 2 -lt 1 || 25 -gt 20 ]]; then
    echo "Given condition is true."
else
    echo "Given condition is false."
fi

# When condition is false
# TRUE && FALSE || FALSE || FALSE
if [[ 10 -gt 9 && 10 == 8 || 3 -gt 4 || 8 -gt 8 ]]; then
    echo "Given condition is true."
else
    echo "Given condition is not true."
fi
```

Output :

```
hruthin@4f7e8c7e4ccb5e3: ~/bashscripts
Welcome to Ubuntu 24.04.1 LTS (GNU/Linux 5.15.167.4-microsoft-standard-WSL2 x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:        https://ubuntu.com/pro

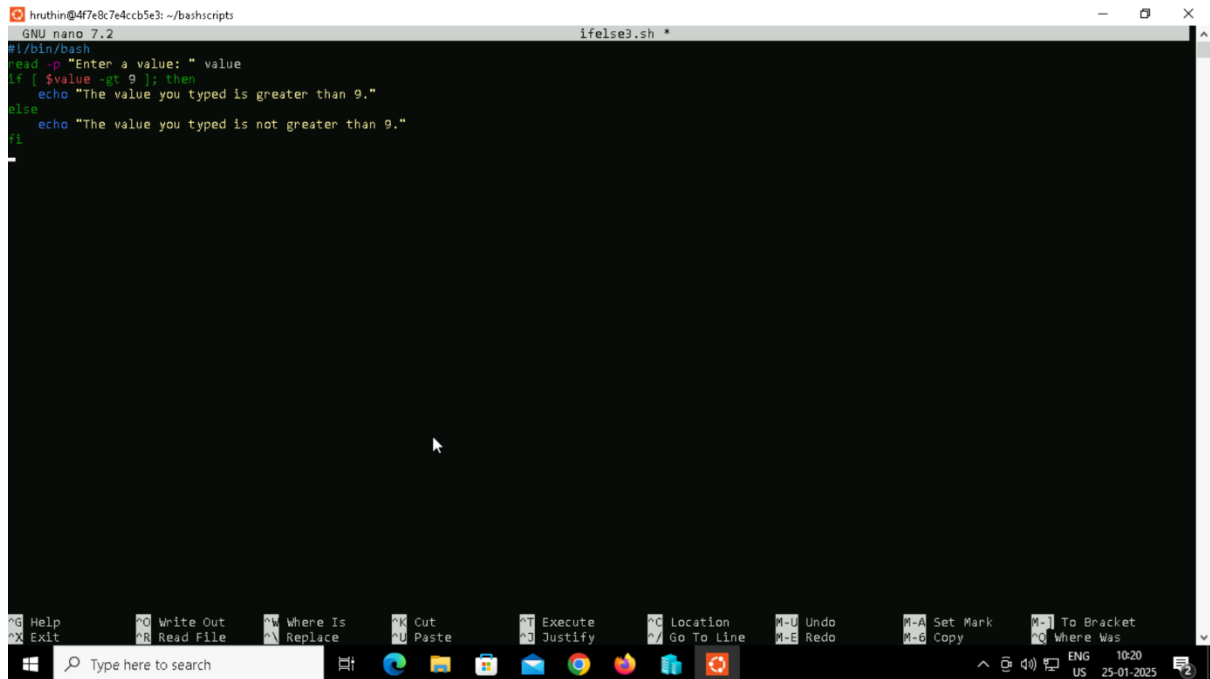
System information as of Sat Jan 25 04:40:21 UTC 2025

System load:  0.15               Processes:    72
Usage of /:   0.2% of 1006.85GB  Users logged in: 0
Memory usage: 5%                IPv4 address for eth0: 172.30.10.97
Swap usage:   0%

This message is shown once a day. To disable it please create the
/home/hruthin/.hushlogin file.
hruthin@4f7e8c7e4ccb5e3:~$ cd bashscripts
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano ifelse1.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x ifelse1.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./ifelse1.sh
10 is greater than 9.
9 is not greater than 10.
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano ifelse2.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x ifelse2.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./ifelse2.sh
Given condition is true.
Given condition is not true.
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$
```

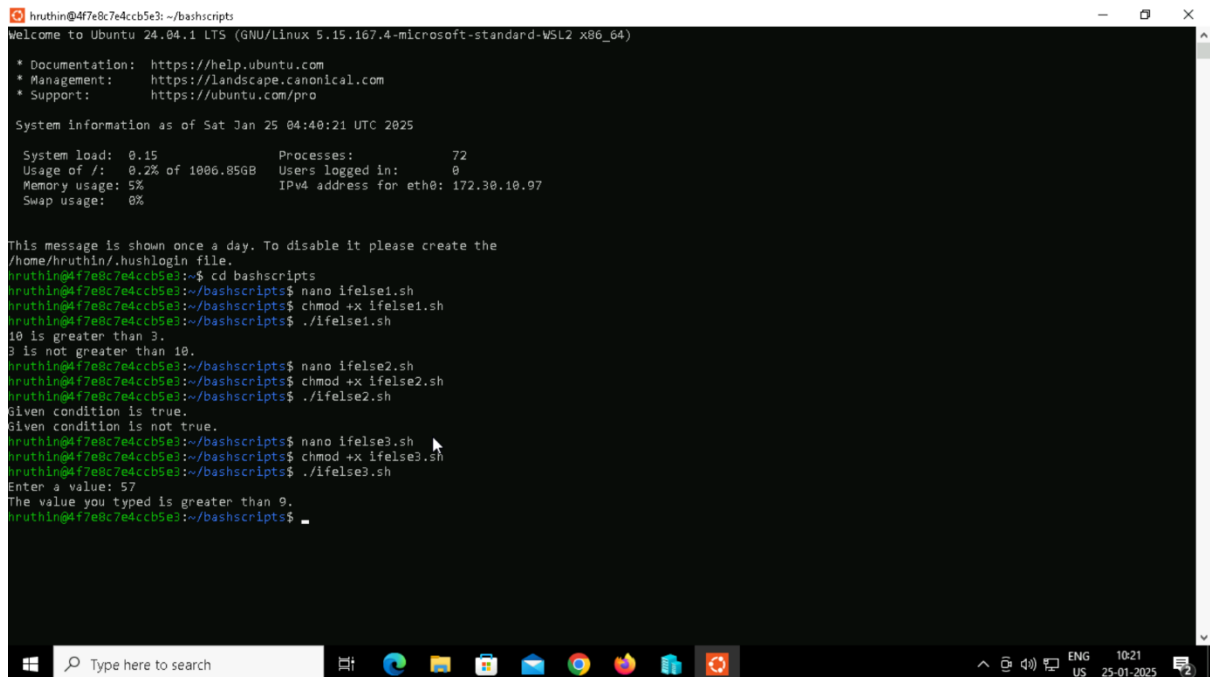
Example 3 ➤ `#!/bin/bash` ➤ `read -p "Enter a value:" value` ➤ `if [$value -gt 9]; then`
`echo "The value you typed is greater than 9."; else echo "The value you typed is not`
`greater than 9."; fi`

Code :



```
GNU nano 7.2 ifelse3.sh
#!/bin/bash
read -p "Enter a value:" value
if [ $value -gt 9 ]; then
    echo "The value you typed is greater than 9."
else
    echo "The value you typed is not greater than 9."
fi
```

Output :



```
hruthin@4f7e8c7e4ccb5e3: ~/bashscripts
Welcome to Ubuntu 24.04.1 LTS (GNU/Linux 5.15.167.4-microsoft-standard-WSL2 x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:        https://ubuntu.com/pro

System information as of Sat Jan 25 04:40:21 UTC 2025

System load:  0.15          Processes:    72
Usage of /:   0.2% of 1006.85GB Users logged in:  0
Memory usage: 5%           IPv4 address for eth0: 172.30.10.97
Swap usage:   0%

This message is shown once a day. To disable it please create the
/home/hruthin/.hushlogin file.
hruthin@4f7e8c7e4ccb5e3:~$ cd bashscripts
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano ifelse1.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x ifelse1.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./ifelse1.sh
10 is greater than 3.
9 is not greater than 10.
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano ifelse2.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x ifelse2.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./ifelse2.sh
given condition is true.
given condition is not true.
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano ifelse3.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x ifelse3.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./ifelse3.sh
Enter a value: 57
The value you typed is greater than 9.
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$
```

Example 4 ➤ `#!/bin/bash` ➤ `read -p "Enter a value:" value` ➤ `if [$value -gt 9];` ➤ `then` ➤ `if [$value -lt 11];` ➤ `then` ➤ `echo "$value>9, $value`

Code :

```
GNU nano 7.2 ifelse4.sh
#!/bin/bash
read -p "Enter a value:" value
if [ $value -gt 9 ]; then
    if [ $value -lt 11 ]; then
        echo "$value > 9, $value < 11"
    else
        echo "The value you typed is greater than 9."
    fi
else
    echo "The value you typed is not greater than 9."
fi
```

Output :

```
hruthin@4f7e8c7e4ccb5e3: ~/bashscripts
Welcome to Ubuntu 24.04.1 LTS (GNU/Linux 5.15.167.4-microsoft-standard-WSL2 x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro

System information as of Sat Jan 25 04:48:21 UTC 2025

System load:  0.15          Processes:      72
Usage of /:   0.2% of 1006.85GB   Users logged in: 0
Memory usage: 5%             IPv4 address for eth0: 172.30.10.97
Swap usage:   0%

This message is shown once a day. To disable it please create the
/home/hruthin/.hushlogin file.
hruthin@4f7e8c7e4ccb5e3:~$ cd bashscripts
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano ifelse1.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x ifelse1.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./ifelse1.sh
10 is greater than 3.
3 is not greater than 10.
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano ifelse2.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x ifelse2.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./ifelse2.sh
Given condition is true.
Given condition is not true.
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano ifelse3.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x ifelse3.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./ifelse3.sh
Enter a value: 57
The value you typed is greater than 9.
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano ifelse4.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x ifelse4.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./ifelse4.sh
Enter a value: 50
The value you typed is greater than 9.
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$
```

ELSE IF :

Example 1 Following example consists of two different scenarios wherein the first else-if statement, the condition is true, and in the second else-if statement, the condition is false.

Code :

```
hruthin@4f7e8c7e4ccb5e3: ~/bashscripts
GNU nano 7.2                               elseif1.sh *
#!/bin/bash

read -p "Enter a number of quantity: " num

if [ $num -gt 100 ]; then
    echo "Eligible for 10% discount"
elif [ $num -lt 100 ]; then
    echo "Eligible for 5% discount"
else
    echo "Lucky Draw Winner"
    echo "Eligible to get the item for free"
fi
```

output :

```
hruthin@4f7e8c7e4ccb5e3: ~/bashscripts
* Documentation:  https://help.ubuntu.com
* Management:    https://landscape.canonical.com
* Support:        https://ubuntu.com/pro

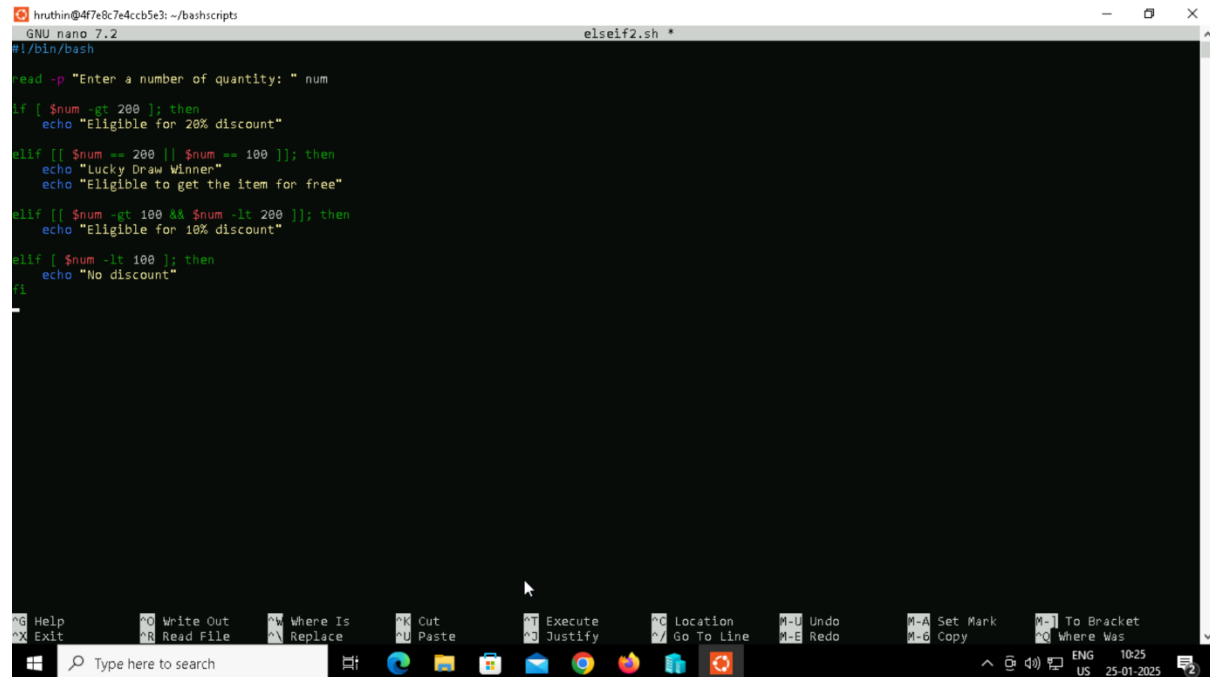
System information as of Sat Jan 25 04:40:21 UTC 2025

System load:  0.15          Processes:      72
Usage of /:   0.2% of 1006.05GB  Users logged in: 0
Memory usage: 5%            IPv4 address for eth0: 172.30.10.97
Swap usage:   0%

This message is shown once a day. To disable it please create the
/home/hruthin/.hushlogin file.
hruthin@4f7e8c7e4ccb5e3:~$ cd bashscripts
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano ifelse1.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x ifelse1.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./ifelse1.sh
10 is greater than 3.
3 is not greater than 10.
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano ifelse2.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x ifelse2.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./ifelse2.sh
Given condition is true.
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano ifelse3.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x ifelse3.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./ifelse3.sh
Enter a value: 57
The value you typed is greater than 9.
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano ifelse4.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x ifelse4.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./ifelse4.sh
Enter a value: 50
The value you typed is greater than 9.
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano elseif1.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x elseif1.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./elseif1.sh
Enter a number of quantity: 10
Eligible for 5% discount
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$
```

Example 2 This example is demonstrating how to use multiple conditions with the else-if statement in Bash. We use bash logical operators to join multiple conditions

Code :

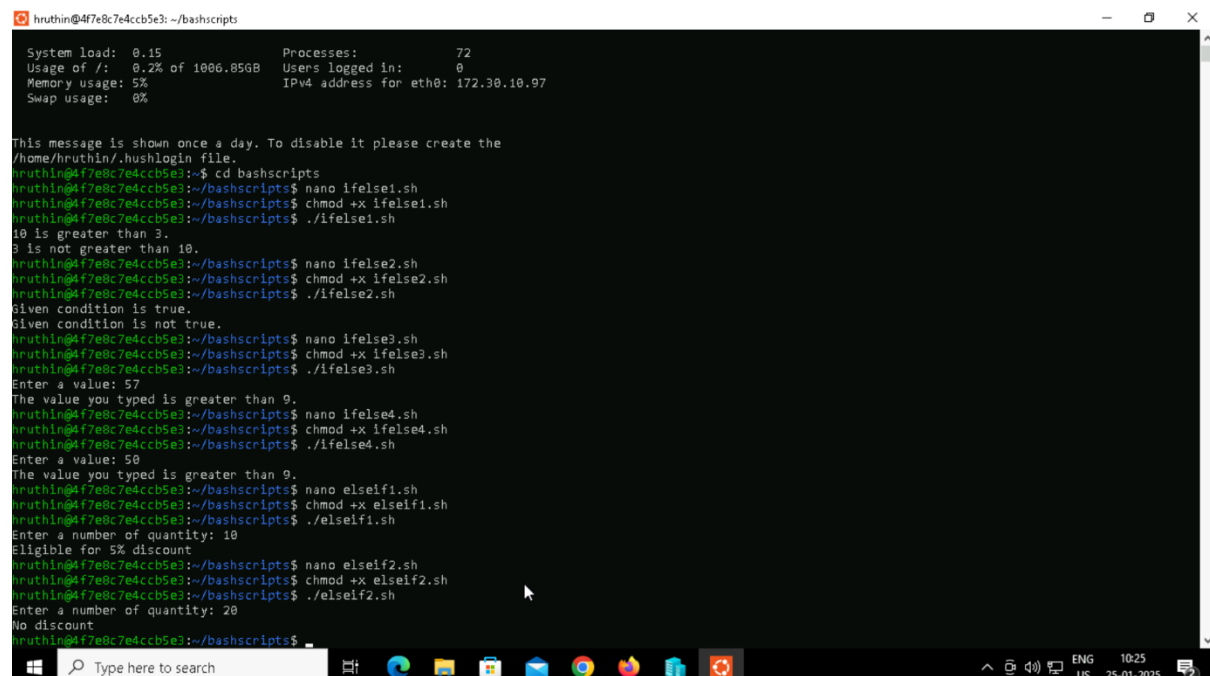


```
GNU nano 7.2      elseif2.sh *
#!/bin/bash

read -p "Enter a number of quantity: " num

if [ $num -gt 200 ]; then
    echo "Eligible for 20% discount"
elif [[ $num == 200 || $num == 100 ]]; then
    echo "Lucky Draw Winner"
    echo "Eligible to get the item for free"
elif [[ $num -gt 100 && $num -lt 200 ]]; then
    echo "Eligible for 10% discount"
elif [ $num -lt 100 ]; then
    echo "No discount"
fi
```

output:



```
System load:  0.15      Processes:    72
Usage of /:  0.2% of 1006.85GB      Users logged in:  0
Memory usage: 5%      IPv4 address for eth0: 172.30.10.97
Swap usage:  0%

This message is shown once a day. To disable it please create the
/home/hruthin/.hushlogin file.
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ cd bashscripts
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano ifelse1.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x ifelse1.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./ifelse1.sh
10 is greater than 3.
3 is not greater than 10.
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano ifelse2.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x ifelse2.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./ifelse2.sh
Given condition is true.
Given condition is not true.
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano ifelse3.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x ifelse3.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./ifelse3.sh
Enter a value: 57
The value you typed is greater than 9.
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano ifelse4.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x ifelse4.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./ifelse4.sh
Enter a value: 50
The value you typed is greater than 9.
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano elseif1.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x elseif1.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./elseif1.sh
Enter a number of quantity: 10
Eligible for 5% discount
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ nano elseif2.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ chmod +x elseif2.sh
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$ ./elseif2.sh
Enter a number of quantity: 20
No discount
hruthin@4f7e8c7e4ccb5e3:~/bashscripts$
```