

# Linux

## LECTURE 7 TASK

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```
GNU nano 6.2 mathTest.sh *
# this program is going to give you 5 arithmetic operation questions within specific range you input
# and print out you your final score, if the final score is 5 out of 5,
# the program will print a message that says smart boy
# I used (for - while ) loops / if condition
score=0

read -p "Enter the range minimum number " min
read -p "Enter the range maximum number " max

echo "Answer the following question"

while true
do

for i in {1..5}
do
    num1=$((RANDOM%($max-$min+1)+$min))
    num2=$((RANDOM%($max-$min+1)+$min))
    sum=$((num1+num2))
    read -p "$num1 + $num2 = " answer

    if [ $sum == $answer ]; then
        ((score++))
    fi
done

echo "You score is $score"
if [ $score == 5 ];then
    echo "YOU ARE A SMART BOY"
fi

read -p "Do you want to play again [y/n] " again
if [ $again == 'y' ];then
    score=0
    continue
elif [ $again == 'n' ]; then
    exit 0
else
    echo "INVALID INPUT"
    exit 0
fi
done
done
```

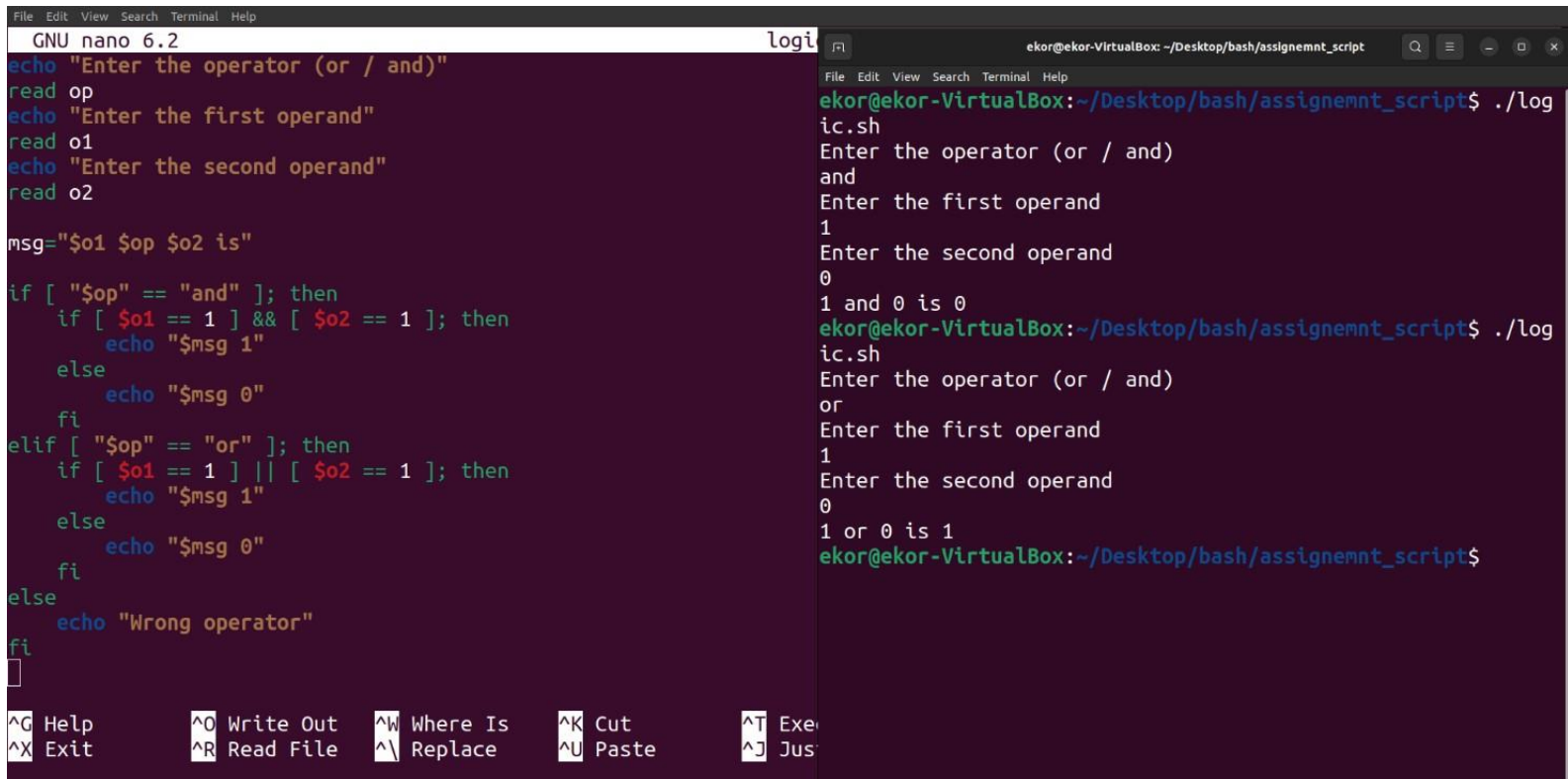
<b>^G</b> Help	<b>^O</b> Write Out	<b>^W</b> Where Is	<b>^K</b> Cut	<b>^T</b> Execute	<b>^C</b> Location	<b>M-U</b> Undo
<b>^X</b> Exit	<b>^R</b> Read File	<b>^\</b> Replace	<b>^U</b> Paste	<b>^J</b> Justify	<b>^/_</b> Go To Line	<b>M-E</b> Redo

## The output of the previous code

```
ekor@ekor-VirtualBox: ~/Desktop/CalcTask
ekor@ekor-VirtualBox:~/Desktop/CalcTask$ ./mathTest.sh
Enter the range minimum number 1
Enter the range maximum number 20
Answer the following question
1 + 2 = 3
2 + 14 = 16
12 + 7 = 19
18 + 16 = 34
7 + 1 = 8
You score is 5
YOU ARE A SMART BOY
Do you want to play again [y/n] y
19 + 5 = 24
9 + 2 = 11
12 + 20 = 42
8 + 20 = 28
11 + 19 = 34
You score is 3
Do you want to play again [y/n] n
ekor@ekor-VirtualBox:~/Desktop/CalcTask$
```

## In the following example:

I used **if** condition with **AND** condition, to simulate the logic gates output



```
GNU nano 6.2 logi
echo "Enter the operator (or / and)"
read op
echo "Enter the first operand"
read o1
echo "Enter the second operand"
read o2

msg="$o1 $op $o2 is"

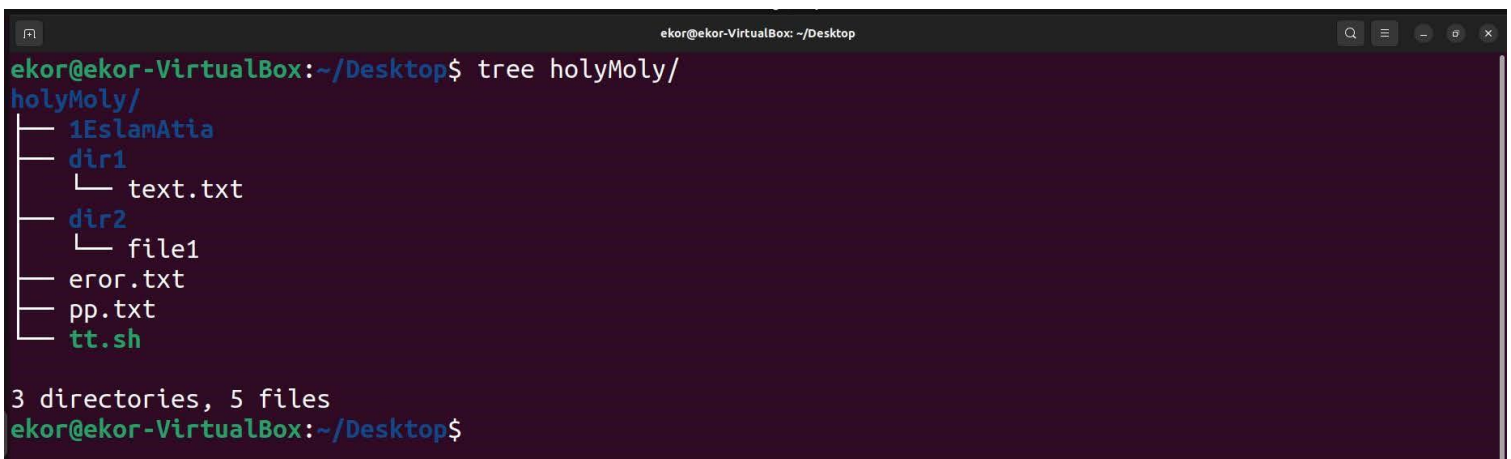
if [ "$op" == "and" ]; then
    if [ $o1 == 1 ] && [ $o2 == 1 ]; then
        echo "$msg 1"
    else
        echo "$msg 0"
    fi
elif [ "$op" == "or" ]; then
    if [ $o1 == 1 ] || [ $o2 == 1 ]; then
        echo "$msg 1"
    else
        echo "$msg 0"
    fi
else
    echo "Wrong operator"
fi

```

```
ekor@ekor-VirtualBox: ~/Desktop/bash/assignemnt_script
ekor@ekor-VirtualBox:~/Desktop/bash/assignemnt_script$ ./log
ic.sh
Enter the operator (or / and)
and
Enter the first operand
1
Enter the second operand
0
1 and 0 is 0
ekor@ekor-VirtualBox:~/Desktop/bash/assignemnt_script$ ./log
ic.sh
Enter the operator (or / and)
or
Enter the first operand
1
Enter the second operand
0
1 or 0 is 1
ekor@ekor-VirtualBox:~/Desktop/bash/assignemnt_script$

```

## A directory within a tree-structured directory



```
ekor@ekor-VirtualBox: ~/Desktop$ tree holyMoly/
holyMoly/
├── 1EslamAtia
├── dir1
│   └── text.txt
├── dir2
│   └── file1
├── eror.txt
├── pp.txt
└── tt.sh

3 directories, 5 files
ekor@ekor-VirtualBox:~/Desktop$

```