

Activities

Terminal ▾

Feb 13 14:54

sravantthi@sravantthi-virtual-machine: ~/

sravantthi@sravantthi-virtual-machine... x

sravantthi@

GNU nano 4.8

echo -n "enter a number"

read number

echo "your entered number is: \$number"

pattern.sh



Get Help
Exit



Write Out
Read File



[Wrote 3 lines]
Where Is
Replace



Cut Text
Paste Text

```
sravantthi@sravantthi-virtual-machine:~/Desktop$ chmod u+x pattern.sh
sravantthi@sravantthi-virtual-machine:~/Desktop$ ./pattern.sh
enter a number3
your entered number is: 3
sravantthi@sravantthi-virtual-machine:~/Desktop$
```

J+1

savantthi@savantthi-Virtu

savantthi@savantthi-virtual-machi...



GNU nano 4.8

pa

```
ROWS=5
for((i=1;i<=5;i++))
do
    for((j=1;j<=ROWS-i;j++))
    do
        echo -n " "
    done
    for((j=1;j<=2*i-1;j++))
    do
        echo -n "*"
    done
    echo
done
```

>-

[Wrote 14 lin

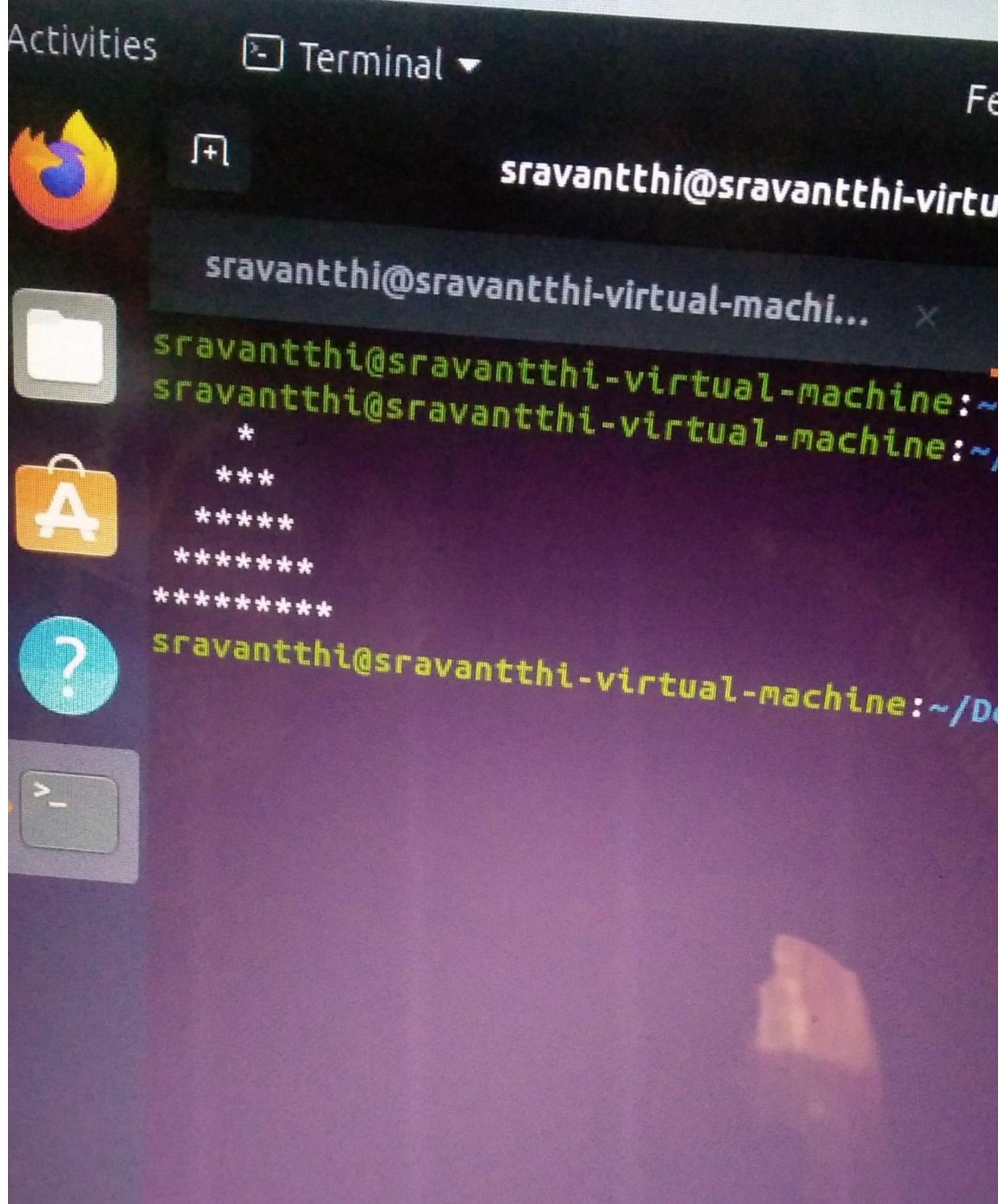
^W Where Is
^R Replace



Get Help
Exit



Write Out
Read File



sravantthi@sravantthi-virtual-machi

sravantthi@sravantthi-virtual-machi... × sravan

GNU nano 4.8 swap.sh

```
num1=30
num2=31
echo "before swapping"
echo"first number:$num1"
echo"second number:$num2"
temp=$num1
num1=$num2
num2=$temp
echo "after swapping"
echo"first number:$num1"
echo"second number:$num2"
```

Get Help Exit Write Out Read File Where Is Replace Cut Paste

[Wrote 12 lines]

```
./swap.sh: line 5: echosecond number:31: command not found  
after swapping  
./swap.sh: line 10: echofirst number:30: command not found  
./swap.sh: line 11: echosecond number:30: command not found  
sravantthi@srvantthi-virtual-machine:~/Desktop$ ./swap.sh  
before swapping  
./swap.sh: line 4: echofirst number:30: command not found  
./swap.sh: line 5: echosecond number:31: command not found  
after swapping  
./swap.sh: line 10: echofirst number:31: command not found  
./swap.sh: line 11: echosecond number:30: command not found  
sravantthi@srvantthi-virtual-machine:~/Desktop$
```



Activities

Terminal ▾

Feb 13 15:



sravantthi@sravantthi-virtual-machi...



GNU nano 4.8

remainder.

dividend=30

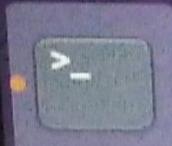
divisor=3

quotient=\$((dividend/divisor))

remainder=\$((dividend%divisor))

echo "quotient:\$quotient"

echo "remainder:\$remainder"



Get Help
Exit

Write Out
Read File

Where Is
Replace

Cut
Pas



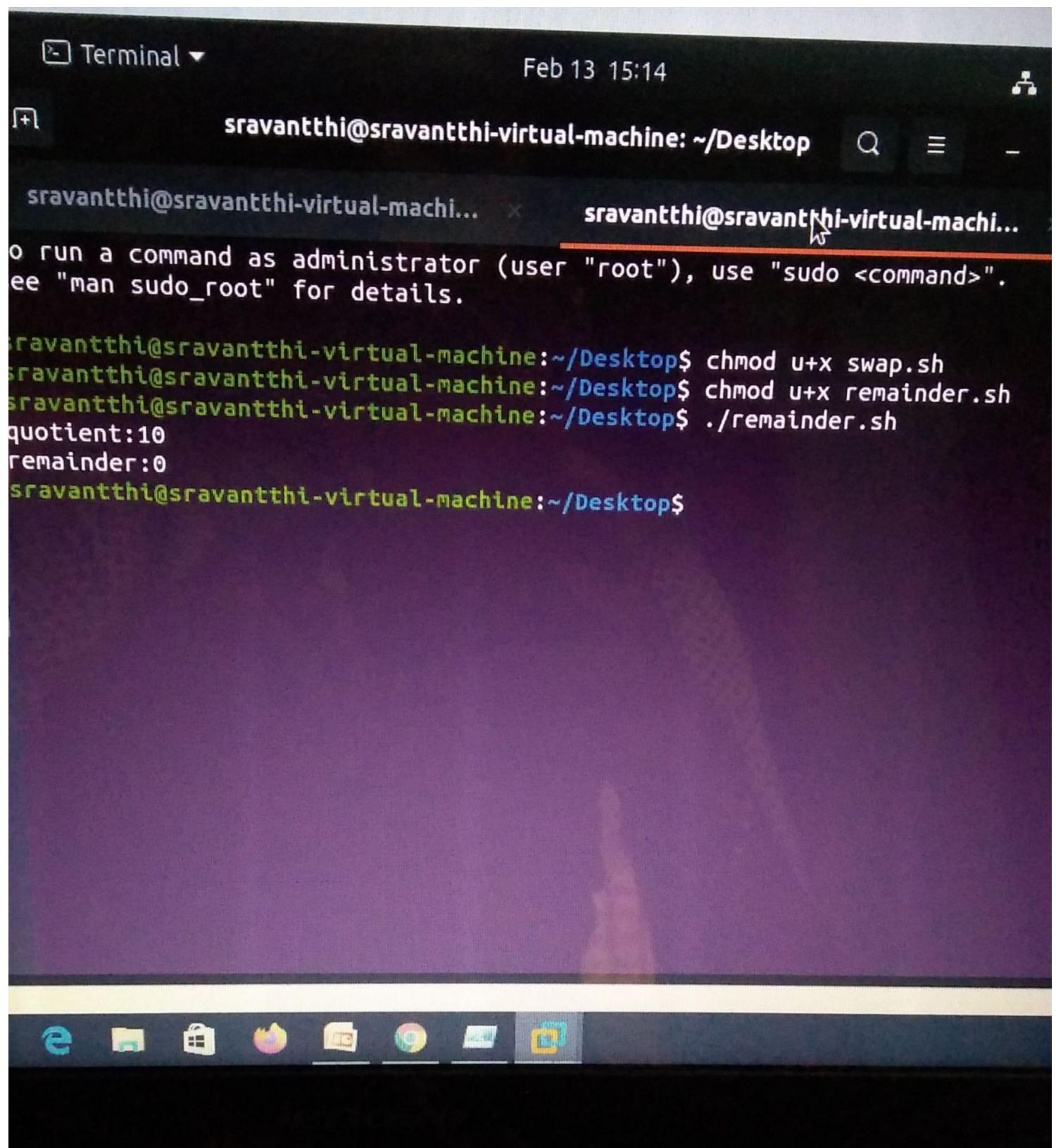
Terminal ▾ Feb 13 15:14

sravantthi@sravantthi-virtual-machine: ~/Desktop

sravantthi@sravantthi-virtual-machine... x sravantthi@sravantthi-virtual-machine...

o run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

```
sravantthi@sravantthi-virtual-machine:~/Desktop$ chmod u+x swap.sh
sravantthi@sravantthi-virtual-machine:~/Desktop$ chmod u+x remainder.sh
sravantthi@sravantthi-virtual-machine:~/Desktop$ ./remainder.sh
quotient:10
remainder:0
sravantthi@sravantthi-virtual-machine:~/Desktop$
```



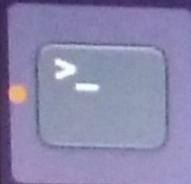
I+1

sravantthi@sravantthi-virtual-m

sravantthi@sravantthi-virtual-machi... x sr

```
GNU nano 4.8
read -p "enter a number:"
if [Snumber -gt 0]
then
    echo "number is positive"
else
    echo "number is negative"
fi
```

positi



^G Get Help
^X Exit

^O Write Out
^R Read File

[Wrote 7 lines
^W Where Is
^V Replace ^K
^U

Movies Terminal ▾ Feb 13 15:24

sravantthi@sravantthi-virtual-machine: ~/

sravantthi@sravantthi-virtual-machi... x sravantthi@

```
sravantthi@sravantthi-virtual-machine:~/Desktop$ ./
enter a number:3
./positlive.sh: line 2: [: missing ']'
number is negative
sravantthi@sravantthi-virtual-machine:~/Desktop$
```

Activities Terminal ▾ Feb 13 15:33

savantthi@savantthi-virtual-machine

GNU nano 4.8

```
num=31
for((i=2;i<=num/2;i++))
do
if [ $((num%i)) -eq 0 ]
then
echo "$num is not a prime number"
exit
fi
done
echo "$num is a prime number"
```

prime.sh

Get Help Write Out Wrote 10 lines
Exit Read File Where Is
Cut Tex

A screenshot of an Ubuntu desktop environment. The terminal window is open and shows the command `./prime.sh` being run, with the output "31 is a prime number". The terminal title is "sravantthi@sravantthi-virtual-machine: ~/Desktop". The desktop background is purple.

```
sravantthi@sravantthi-virtual-machine: ~/Desktop$ ./prime.sh
31 is a prime number
sravantthi@sravantthi-virtual-machine: ~/Desktop$
```

ivities

Terminal ▾

Feb 13 15:4



savantthi@savantthi-virtual-machi...

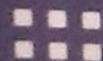
savantthi@savantthi-virtual-machi... ×

savant...

GNU nano 4.8

fact.sh

```
echo -n "enter a number:"  
read number  
factorial=1  
for(( i=1; i<=number; i++ ))  
do  
    factorial=$(( factorial * $i ))  
done  
echo "the factorial of $number is $factorial"
```



Get Help



Write Out

[Wrote 8 lines]

A screenshot of an Ubuntu desktop environment. The top bar shows icons for system settings, network, and windows management. The title bar of the terminal window says "Activities Terminal (4)". The terminal window has a dark background and displays the following text:

```
savantthi@savantthi-virtual-machine: ~/Desktop
savantthi@savantthi-virtual-machine:~/Desktop$ ./fact.sh
enter a number:4
the factorial of 4 is 24
savantthi@savantthi-virtual-machine:~/Desktop$
```

Activities

Terminal ▾

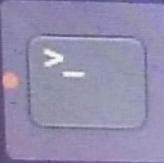
Feb 13 16



srawantthi@srawantthi-virtual-machi...



```
GNU nano 4.8
matrix1=[ 1 2 3 4 ]
matrix2=[ 5 6 7 8 ]
rows=2
cols=2
echo "first matrix"
for((i=0; i<rows; i++))
do
    for((j=0; j<cols; j++))
    do
        index=$((i*cols+j))
        echo -n "${matrix1[index]}"
    done
    echo
done
echo "second matrix"
for((i=0; i<rows; i++))
do
    for((j=0; j<cols; j++))
    do
        index=$((i*cols+j))
        echo -n "${matrix2[index]}"
    done
```



>-

Get Help
Exit

Write Out
Read File

Where Is
Replace

Cut T
Paste



Activities

Terminal ▾

Feb 13 16:12



savantthi@savantthi-virtual-machine: ~/Desktop

savantthi@savantthi-virtual-machine...

savantthi@savantthi-v

GNU nano 4.8

matrix.sh

```
done
k=0
matrix3=( )
for((i=0; i<rows; i++))
do
    for((j=0; j<cols; j++))
do
    index=$((i*cols+j))
    matrix3[k] = $(( ${matrix1[index]}+${matrix2[index]} ))
    k=$((k+1))
done
done
echo "addition of two matrix"
for((i=0; i<rows; i++))
do
    for((j=0; j<cols; j++))
do
    index=$((i*cols+j))
    echo -n "${matrix3[index]}"
done
echo
done
```



Get Help
^G



Exit
^X



Write Out
^W



Where Is
^W



Cut Text
^K



Paste Text
^U

Just To Sp
^J



Read File
^R



Replace
^R



Activities Terminal Feb 13 16:28

srvantthi@srvantthi-virtual-machine: ~/Desktop

sravantthi@srvantthi-virtual-machine... x sravantthi@srvantthi-virtual-machine...

GNU nano 4.8 transpose.sh

```
matrix1=(1 2 3 4 5 6 7 8 9 )
rows=3
cols=3
echo "matrix"
for((i=0; i<rows; i++))
do
    for((j=0; j<cols; j++))
    do
        index=$((i*cols+j))
        echo -n "${matrix1[index]}"
    done
    echo
done

for((i=0; i<rows; i++))
do
    for((j=i+1; j<cols; j++))
    do
        index1=$((rows*i + j))
        index2=$((rows*j + i))
        temp=${matrix1[index1]}
        matrix1[index1]=${matrix1[index2]}
        matrix1[index2]=$temp
    done
done
```

Get Help Write Out Where Is Cut Text Justify
Exit Read File Replace Paste Text To Spell

tu 64-bit (4) ×

Activities Terminal ▾ Feb 13 16:28

savantthi@savantthi-virtual-machine: ~/Desktop

GNU nano 4.8 transpose.sh

```
do
for((j=i+1; j<cols; j++))
do
    index1=$((rows*i + j))
    index2=$((rows*j + i))
    temp=${matrix1[index1]}
    matrix1[index1]="${matrix1[index2]}"
    matrix1[index2]=$temp
done
done

echo "transpose of a matrix"
for((i=0; i<rows; i++))
do
    for((j=0; j<cols; j++))
do
    index=$((i*cols+j))
    echo -n "${matrix1[index]}"
done
echo
done
```

Get Help Write Out Where Is Cut Text Justify
Exit Read File Replace Paste Text To Spell

This screenshot shows a Linux desktop environment with a terminal window open. The terminal window title is 'GNU nano 4.8 transpose.sh'. The script content is a Bash script for transposing a matrix. It uses nested loops to iterate through rows and columns, and temporary variables to swap elements. The terminal window has a dark background with light-colored text. The desktop interface includes a dock at the bottom with icons for various applications like a browser, file manager, and terminal. The top bar shows the date and time (Feb 13 16:28) and the user's name (savantthi@savantthi-virtual-machine). The overall theme is a standard Linux desktop with a dark color scheme.

Activities

Terminal ▾

Fe



savantthi@savantthi-virtu...



GNU nano 4.8

US

\$cut -d " : " -f 1 /etc/passwd

\$awk -F: '{print \$1}' /etc/passwd



>-



Get Help
^X Exit

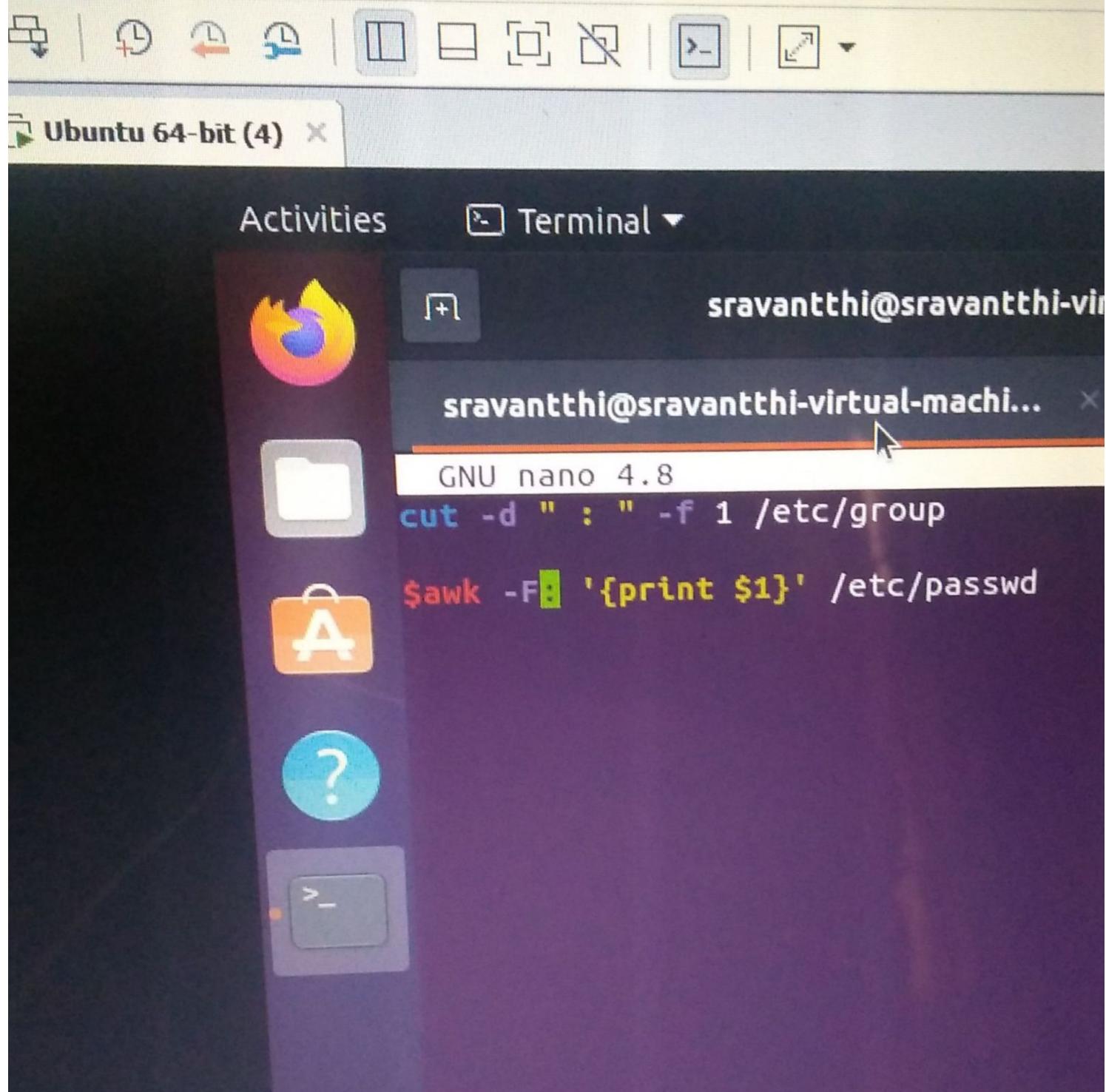


Write Out
^R Read File



Where Is
^V Replace

6540321



Activities

Terminal ▾

Feb 13 16:47



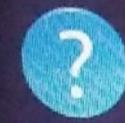
sravantthi@sravantthi-virtual-machine: ~/Desktop/



GNU nano 4.8

root.sh

```
read -p "enter a number: " number
square_root=$(echo "$number" | awk '{print sqrt($1)})'
echo "square root of $number is $square_root"
```



line 2/4 (50%), col 55/55 (100%), char 88/135 (6)

Get Help Write Out Where Is Cut Text
Exit Read File Replace Paste Text



Terminal ▾

Feb 13 16:48

sravantthi@sravantthi-virtual-machine: ~/Desktop

sravantthi@sravantthi-virtual-machi...

sravantthi@sravantthi-vi

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

```
sravantthi@sravantthi-virtual-machine:~/Desktop$ chmod u+x root.sh
sravantthi@sravantthi-virtual-machine:~/Desktop$ ./root.sh
enter a number: 2
square root of 2 is 1.4142
sravantthi@sravantthi-virtual-machine:~/Desktop$ ./root.sh
enter a number: 1
square root of 1 is 1
sravantthi@sravantthi-virtual-machine:~/Desktop$ ./root.sh
enter a number: 3
square root of 3 is 1.7320
sravantthi@sravantthi-virtual-machine:~/Desktop$ ./root.sh
enter a number: 2
square root of 2 is 1.4142
sravantthi@sravantthi-virtual-machine:~/Desktop$
```



Activities Terminal ▾ Feb 13 16:54

sravantthi@sravantthi-virtual-machine: ~/Desktop Q

sravantthi@sravantthi-virtual-machi... x sravantthi@sravantthi-virtu

```
GNU nano 4.8 triangle.sh
read -p "enter the 1st side: " a
read -p "enter the 2nd side: " b
read -p "enter the 3rd side: " c
s=`echo "scale=4; ($a+$b+$c)/2" | bc`
area=`echo "scale=4; sqrt($s*($s-$a)*($s-$b)*($s-$c))" | bc`
echo "the area of the triangle is $area"
```

?

^G Get Help ^O Write Out ^W Where Is ^K Cut Text ^J Justify
^X Exit ^R Read File ^V Replace ^U Paste Text ^T To Spell

Activities Terminal ▾ Feb 13 16:54

savantthi@savantthi-virtual-machine: ~/Desktop

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

```
savantthi@savantthi-virtual-machine:~/Desktop$ chmod u+x triangle.sh
savantthi@savantthi-virtual-machine:~/Desktop$ ./triangle.sh
bash: ./triangle.sh: No such file or directory
savantthi@savantthi-virtual-machine:~/Desktop$ ./triangle.sh
enter the 1st side: 3
enter the 2nd side: 4
enter the 3rd side: 5
the area of the triangle is 6.0000
savantthi@savantthi-virtual-machine:~/Desktop$
```

Activities Terminal Feb 13 16:57

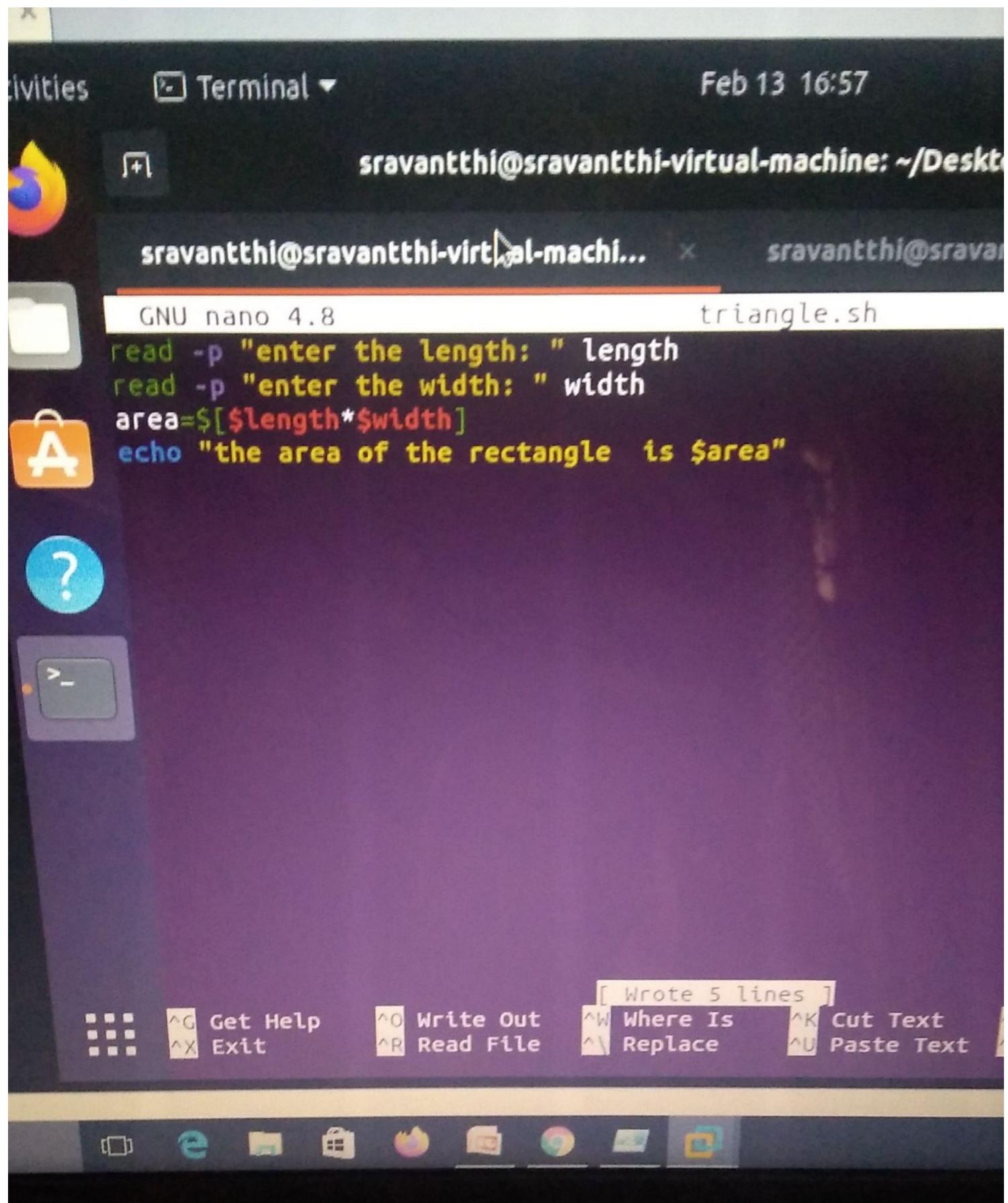
savantthi@savantthi-virtual-machine: ~/Desktop

triangle.sh

```
GNU nano 4.8
read -p "enter the length: " length
read -p "enter the width: " width
area=$((length*width))
echo "the area of the rectangle is $area"
```

Wrote 5 lines]

[Get Help ^G Write Out ^O Where Is ^W Cut Text ^K
Exit ^X Read File ^R Replace ^Y Paste Text ^U]



A screenshot of an Ubuntu desktop environment. The terminal window shows the execution of a shell script named 'triangle.sh' which calculates the area of a rectangle given its length and width. The terminal output is as follows:

```
savantthi@savantthi-virtual-machine:~/Desktop$ ./triangle.sh
enter the length: 5
enter the width: 3
the area of the rectangle is 15
savantthi@savantthi-virtual-machine:~/Desktop$ ./triangle.sh
enter the length: 3
enter the width: 5
the area of the rectangle is 15
savantthi@savantthi-virtual-machine:~/Desktop$
```

The screenshot shows a Linux desktop environment with a terminal window and a nano editor window.

Terminal Window:

- Top bar: "Terminal" icon, "Feb 13 17:03", user icon.
- Tab: "sravantthi@sravantthi-virtual-machine: ~/Desktop"
- Content: "sravantthi@sravantthi-virtual-machi..." (repeated twice), "degree.sh" file content.

```
GNU nano 4.8
read -p "enter degree celsius temperature: " celsius
fahrenheit=`echo "scale=4; $celsius*1.8 + 32" | bc`
echo "$celsius degree celsius is equal to $fahrenheit degree fahrenheit"
```

Nano Editor Window:

- Title bar: "degree.sh".
- Text area: "I" (Insert mode).
- Bottom menu:
 - Get Help (Alt+G)
 - Exit (Alt+X)
 - Write Out (Alt+O)
 - Read File (Alt+R)
 - Where Is (Alt+W)
 - Replace (Alt+\)
 - Cut Text (Alt+K)
 - Paste Text (Alt+U)
 - Justify (Alt+J)
 - To Spell (Alt+T)
- Bottom dock: Icons for Home, Terminal, File Manager, Firefox, Google Chrome, and others.

A screenshot of a Linux desktop environment, likely Ubuntu, showing a terminal window. The terminal window has a dark purple background and contains the following text:

```
sravantthi@sravantthi-virtual-machine:~/Desktop$ chmod u+x degree.sh
sravantthi@sravantthi-virtual-machine:~/Desktop$ ./degree.sh
enter degree celsius temperature: 37
37 degree celsius is equal to 98.6 degree fahrenheit
sravantthi@sravantthi-virtual-machine:~/Desktop$
```

The terminal window is titled "Terminal". The desktop interface includes a dock at the bottom with icons for various applications like a file manager, browser, and messaging.

Terminal ▾ Feb 13 17:07

savantthi@savantthi-virtual-machine: ~/Desktop

GNU nano 4.8 degree.sh

```
read -p "enter degree fahrenheit temperature: " fahrenheit
celsius=`echo "scale=4; ($fahrenheit-32) / 1.8" | bc`
echo "$fahrenheit degree fahrenheit is equal to $celsius degree celsius"
```

[Wrote 3 lines]

Get Help Exit Write Out Read File Where Is Replace Cut Text Paste Text Justify To Spell

This image shows a screenshot of a Linux desktop environment, specifically Ubuntu, with a terminal window open. The terminal window title is 'Terminal' and the date and time are 'Feb 13 17:07'. The user's session is listed as 'savantthi@savantthi-virtual-machine: ~/Desktop'. The terminal content is a shell script named 'degree.sh' written in GNU nano 4.8. The script reads a Fahrenheit temperature from the user, converts it to Celsius using the formula \$((\$fahrenheit-32) / 1.8), and then prints the result. A message box at the bottom of the terminal indicates that 3 lines were written. The terminal has a standard nano interface with various keyboard shortcuts like ^G for Get Help, ^X for Exit, ^O for Write Out, etc. Below the terminal, the Unity desktop interface is visible with its characteristic dock icons.

A screenshot of a Linux desktop environment, likely Ubuntu, showing a terminal window. The terminal window title is "sravantthi@sravantthi-virtual-machine: ~/Desktop". The terminal shows the execution of a shell script named "degree.sh". The user enters "37" and the script outputs "37 degree celsius is equal to 98.6 degree fahrenheit". The user then enters "100" and the script outputs "100 degree fahrenheit is equal to 37.7777 degree celsius".

```
sravantthi@sravantthi-virtual-machine:~/Desktop$ chmod u+x degree.sh
sravantthi@sravantthi-virtual-machine:~/Desktop$ ./degree.sh
enter degree celsius temperature: 37
37 degree celsius is equal to 98.6 degree fahrenheit
sravantthi@sravantthi-virtual-machine:~/Desktop$ ./degree.sh
enter degree fahrenheit temperature: 100
100 degree fahrenheit is equal to 37.7777 degree celsius
sravantthi@sravantthi-virtual-machine:~/Desktop$
```