

First shellscript

```
tejal@Tejal-VirtualBox:~$ nano tejalscript.sh  
tejal@Tejal-VirtualBox:~$
```

First shellscript



```
GNU nano 6.2          tejalscript.sh
ls
```

[Read 2 lines]

^G Help	^O Write Out	^W Where Is	^K Cut	^T Execute	^C Location
^X Exit	^R Read File	^\ Replace	^U Paste	^J Justify	^/ Go To Line

First shellscript

```
tejal@Tejal-VirtualBox: ~  
tejal@Tejal-VirtualBox:~$ nano tejalscript.sh  
tejal@Tejal-VirtualBox:~$ sudo chmod +x tejalscript.sh\  
>  
[sudo] password for tejal:  
tejal@Tejal-VirtualBox:~$ ls  
add1.c      archive.zip  Downloads  PPL          stackpr      textcmpr1.txt  
add3.c      ass7.c      DTL        Public       sum1.c       textcmpr2.txt  
add.c       ass8.c      greet      SLL.c        tejalscript.sh Videos  
a.out       Desktop     Music      snap         Templates  
archive.tar Documents   Pictures   stack_arr.c  textcmpr1
```

First shellscrip

```
tejal@Tejal-VirtualBox: ~  
add1.c      archive.zip Downloads  DTL      Public  sum1.c      textcmp2.txt  
add3.c      ass7.c      greet      SLL.c    tejalscript.sh Videos  
a.out       Desktop     Music      snap     Templates  
archive.tar Documents    Pictures   stack_arr.c textcmp1  
tejal@Tejal-VirtualBox:~$ ls -l  
total 120  
-rw-rw-r-- 1 tejal tejal  152 Jan  3 20:49 add1.c  
-rw-rw-r-- 1 tejal tejal   78 Jan  3 10:00 add3.c  
-rw-rw-r-- 1 tejal tejal    0 Jan  3 20:32 add.c  
-rwxrwxr-x 1 tejal tejal 16544 Jan  6 08:44 a.out  
-rw-rw-r-- 1 tejal tejal 10240 Jan  3 23:38 archive.tar  
-rw-rw-r-- 1 tejal tejal  187 Jan  3 23:52 archive.zip  
-rw-rw-r-- 1 tejal tejal  5044 Jan  7 22:51 ass7.c  
-rw-rw-r-- 1 tejal tejal    0 Jan 10 21:21 ass8.c  
drwxr-xr-x 2 tejal tejal  4096 Jan  2 22:31 Desktop  
drwxr-xr-x 2 tejal tejal  4096 Jan  2 22:31 Documents  
drwxr-xr-x 3 tejal tejal  4096 Jan 16 20:07 Downloads  
drwxrwxr-x 2 tejal tejal  4096 Jan  3 21:14 DTL  
-rw-rw-r-- 1 tejal tejal    3 Jan  3 23:24 greet  
drwxr-xr-x 2 tejal tejal  4096 Jan  2 22:31 Music  
drwxr-xr-x 2 tejal tejal  4096 Jan 10 21:21 Pictures
```

First shellscrip

```
-rw-rw-r-- 1 tejal tejal 187 Jan 3 23:52 archive.zip
-rw-rw-r-- 1 tejal tejal 5044 Jan 7 22:51 ass7.c
-rw-rw-r-- 1 tejal tejal 0 Jan 10 21:21 ass8.c
drwxr-xr-x 2 tejal tejal 4096 Jan 2 22:31 Desktop
drwxr-xr-x 2 tejal tejal 4096 Jan 2 22:31 Documents
drwxr-xr-x 3 tejal tejal 4096 Jan 16 20:07 Downloads
drwxrwxr-x 2 tejal tejal 4096 Jan 3 21:14 DTL
-rw-rw-r-- 1 tejal tejal 3 Jan 3 23:24 greet
drwxr-xr-x 2 tejal tejal 4096 Jan 2 22:31 Music
drwxr-xr-x 3 tejal tejal 4096 Jan 10 21:34 Pictures
drwxrwxr-x 2 tejal tejal 4096 Jan 3 21:10 PPL
drwxr-xr-x 2 tejal tejal 4096 Jan 2 22:31 Public
-rw-rw-r-- 1 tejal tejal 3626 Jan 5 19:32 SLL.c
drwx----- 5 tejal tejal 4096 Feb 6 08:37 snap
-rw-rw-r-- 1 tejal tejal 0 Jan 7 22:47 stack_arr.c
drwxrwxr-x 2 tejal tejal 4096 Jan 24 09:20 stackpr
-rw-rw-r-- 1 tejal tejal 0 Jan 4 11:24 sum1.c
-rwxrwxr-x 1 tejal tejal 4 Feb 5 23:06 tejalscript.sh
drwxr-xr-x 2 tejal tejal 4096 Jan 2 22:31 Templates
-rw-rw-r-- 1 tejal tejal 0 Jan 4 11:24 textcmpr1
-rwxrwxr-x 1 tejal tejal 11 Jan 4 11:24 textcmpr1.txt
-rw-rw-r-- 1 tejal tejal 15 Jan 3 23:35 textcmpr2.txt
drwxr-xr-x 2 tejal tejal 4096 Jan 2 22:31 Videos
tejal@Tejal-VirtualBox:~$
```

First shellsript

```
tejal@Tejal-VirtualBox:~$ ./tejalscript.sh
add1.c      archive.zip Downloads PPL      stackpr      textcmp1.txt
add3.c      ass7.c      DTL         Public     sum1.c       textcmp2.txt
add.c       ass8.c      greet       SLL.c      tejalscript.sh Videos
a.out       Desktop    Music       snap       Templates
archive.tar Documents Pictures  stack_arr.c textcmp1
tejal@Tejal-VirtualBox:~$
```

```
GNU nano 6.2          tejalscript.sh
ls
pwd

[ Read 5 lines ]
^G Help      ^O Write Out  ^W Where Is   ^K Cut        ^T Execute    ^C Location
^X Exit      ^R Read File  ^\ Replace    ^U Paste       ^J Justify    ^_ Go To Line
```

Added pwd

```
tejal@Tejal-VirtualBox:~$ pwd
/home/tejal
tejal@Tejal-VirtualBox:~$ nano tejalscript.sh
tejal@Tejal-VirtualBox:~$ nano tejalscript.sh
tejal@Tejal-VirtualBox:~$ ./tejalscript.sh
add1.c      archive.zip  Downloads  PPL          stackpr      textcmpr1.txt
add3.c      ass7.c      DTL        Public       sum1.c       textcmpr2.txt
add.c       ass8.c      greet      SLL.c       tejalscript.sh Videos
a.out       Desktop     Music      snap         Templates
archive.tar Documents  Pictures   stack_arr.c textcmpr1
/home/tejal
tejal@Tejal-VirtualBox:~$
```


Hello world



The image shows a terminal window with the GNU nano 6.2 text editor. The editor is editing a file named `tejalscript.sh`. The content of the file is a single line: `echo "Hello World :)"`. The editor's status bar at the bottom displays various keyboard shortcuts for navigation and editing, such as `^G Help`, `^O Write Out`, `^W Where Is`, `^K Cut`, `^T Execute`, `^C Location`, `^X Exit`, `^R Read File`, `^_ Replace`, `^U Paste`, `^J Justify`, and `^_ Go To Line`. A small status bar above the shortcuts indicates `[Read 7 lines]`.

```
GNU nano 6.2                      tejalscript.sh
#!/bin/bash

echo "Hello World :)"

[ Read 7 lines ]
^G Help      ^O Write Out ^W Where Is  ^K Cut       ^T Execute   ^C Location
^X Exit      ^R Read File ^_ Replace   ^U Paste     ^J Justify   ^_ Go To Line
```

```
tejal@Tejal-VirtualBox:~$ nano tejalscript.sh
```

```
tejal@Tejal-VirtualBox:~$ ./tejalscript.sh
```

```
Hello World :)
```

```
tejal@Tejal-VirtualBox:~$ █
```

GNU nano 6.2

tejalscript.sh *

#!/bin/bash

echo "Hello World :)"

echo "My current working directory is: "
pwd

^G Help
^X Exit

^O Write Out
^R Read File

^W Where Is
^_ Replace

^K Cut
^U Paste

^T Execute
^J Justify

^C Location
^_ Go To Line

```
tejal@Tejal-VirtualBox:~$ nano tejalscript.sh
tejal@Tejal-VirtualBox:~$ ./tejalscript.sh
Hello World :)
tejal@Tejal-VirtualBox:~$ nano tejalscript.sh
tejal@Tejal-VirtualBox:~$ ./tejalscript.sh
Hello World :)
My current working directory is:
/home/tejal
tejal@Tejal-VirtualBox:~$
```

```
tejal@Tejal-VirtualBox:~$ myMIS="112103060"
```

```
tejal@Tejal-VirtualBox:~$ echo $myMIS
```

```
112103060
```

```
tejal@Tejal-VirtualBox:~$ █
```

GNU nano 6.2

tejalscript.sh *

#!/bin/bash

myname="Tejal"

myage="20"

mycollege="COEP"

echo "Hello! My name is \$myname. "

echo "I am \$myage yeaars old. "

echo "I study in \$mycollege"

Save modified buffer?

Y Yes

N No

^C Cancel

```
tejal@Tejal-VirtualBox:~$ nano tejalscript.sh
tejal@Tejal-VirtualBox:~$ ./tejalscript.sh
Hello! My name is Tejal.
I am 20 yeaars old.
I study in COEP
tejal@Tejal-VirtualBox:~$
```

```
tejal@Tejal-VirtualBox:~$ files=$(ls)
tejal@Tejal-VirtualBox:~$ echo $files
add1.c add3.c add.c a.out archive.tar archive.zip ass7.c ass8.c Desktop Document
s Downloads DTL greet Music Pictures PPL Public SLL.c snap stack_arr.c stackpr s
um1.c tejalscript.sh Templates textcmpr1 textcmpr1.txt textcmpr2.txt Videos
tejal@Tejal-VirtualBox:~$
```



```
tejal@Tejal-VirtualBox:~$ expr 5 + 3
8
tejal@Tejal-VirtualBox:~$ expr 5 \ 3
expr: syntax error: unexpected argument ' 3'
tejal@Tejal-VirtualBox:~$ expr 5 / 3
1
tejal@Tejal-VirtualBox:~$
```

```
GNU nano 6.2 if.sh
#!/bin/bash

mynum=5

if [ $mynum -eq 5 ]
then
    echo "True"
fi
```

[Read 9 lines]

^G Help	^O Write Out	^W Where Is	^K Cut	^T Execute	^C Location
^X Exit	^R Read File	^I Replace	^U Paste	^J Justify	^_ Go To Line

```
GNU nano 6.2                                if.sh *
#!/bin/bash

mynum=5

if [ $mynum -eq 5 ]
then
    echo "True"
fi
```

^G Help	^O Write Out	^W Where Is	^K Cut	^T Execute	^C Location
^X Exit	^R Read File	^_ Replace	^U Paste	^J Justify	^/ Go To Line

```
tejal@Tejal-VirtualBox:~$ nano if.sh
tejal@Tejal-VirtualBox:~$ nano if.sh
tejal@Tejal-VirtualBox:~$ sudo chmod +x if.sh
[sudo] password for tejal:
tejal@Tejal-VirtualBox:~$ ./if.sh
./if.sh: line 5: [: missing `]'
tejal@Tejal-VirtualBox:~$ nano if.sh
tejal@Tejal-VirtualBox:~$ ./if.sh
True
tejal@Tejal-VirtualBox:~$
```

```
GNU nano 6.2 ifelse.sh *
#!/bin/bash

mynum=4

if [ $mynum -gt 3 ]
then
    echo "$mynum is greater than 3"
else
    echo "$mynum is less than 3 "
fi
```

^G Help	^O Write Out	^W Where Is	^K Cut	^T Execute	^C Location
^X Exit	^R Read File	^_ Replace	^U Paste	^J Justify	^/ Go To Line

```
tejal@Tejal-VirtualBox:~$ sudo chmod +x ifelse.sh
tejal@Tejal-VirtualBox:~$ ./ifelse.sh
4 is greater than 3
tejal@Tejal-VirtualBox:~$
```

```
if [ -f ~/myfile ]  
then  
    echo "tHE FILE EXISTS"  
else  
    echo "The file does not exist"  
fi
```

[Read 10 lines]

^G Help

^O Write Out

^W Where Is

^K Cut

^T Execute

^C Location

GNU nano 6.2

dowhile.sh *

```
while [ -f ~/testfile ]
```

```
do
```

```
    echo "As of $(date), the testfile exists"
```

```
done
```

```
echo "As of $(date), the test file has gone missing."
```



```
tejal@Tejal-VirtualBox:~$ ./dowhile.sh
```

```
As of Monday 06 February 2023 11:47:34 AM IST, the test file has gone missing.
```

```
tejal@Tejal-VirtualBox:~$
```

GNU nano 6.2

tej.sh

```
myvar=10

while [ $myvar -ge 1 ]
do
    echo $myvar
    myvar=$(( $myvar -1 ))
done
```

[Read 12 lines]

^G Help

^O Write Out

^W Where Is

^K Cut

^T Execute

^C Location

^X Exit

^R Read File

^_ Replace

^U Paste

^J Justify

^_ Go To Line

```
tejal@Tejal-VirtualBox: ~  
tejal@Tejal-VirtualBox:~$ nano tej.sh  
tejal@Tejal-VirtualBox:~$ ./tej.sh  
10  
9  
8  
7  
6  
5  
4  
3  
2  
1  
tejal@Tejal-VirtualBox:~$
```

GNU nano 6.2

loop.sh

```
for (( i = 1; i <= 5; i++ ))
do

    for (( j = 1 ; j <= $i; j++ ))
    do
        echo -n "~ "
    done

    echo ""
done
```

```
tejal@Tejal-VirtualBox:~$ ./loop.sh
```

```
~
```

```
~ ~
```

```
~ ~ ~
```

```
~ ~ ~ ~
```

```
~ ~ ~ ~ ~
```

```
tejal@Tejal-VirtualBox:~$
```