

# BASH TASKS

---

1

```
yogi@DESKTOP-GA5AC52: ~  
To run a command as administrator (user "root"), use "sudo <command>".  
See "man sudo_root" for details.  
  
yogi@DESKTOP-GA5AC52:~$ ls  
yogi@DESKTOP-GA5AC52:~$ la  
.bash_history .bash_logout .bashrc .motd_shown .profile  
yogi@DESKTOP-GA5AC52:~$ man  
What manual page do you want?  
For example, try 'man man'.  
yogi@DESKTOP-GA5AC52:~$ man man  
yogi@DESKTOP-GA5AC52:~$ pwd  
/home/yogi  
yogi@DESKTOP-GA5AC52:~$ ls  
yogi@DESKTOP-GA5AC52:~$ la  
.bash_history .bash_logout .bashrc .lessht .motd_shown .profile  
yogi@DESKTOP-GA5AC52:~$
```

2

```
yogi@DESKTOP-GA5AC52:~$ ls  
a  
yogi@DESKTOP-GA5AC52:~$ ls -a  
. . . .bash_history .bash_logout .bashrc .lessht .motd_shown .profile a  
yogi@DESKTOP-GA5AC52:~$ man cat  
yogi@DESKTOP-GA5AC52:~$ cd a  
yogi@DESKTOP-GA5AC52:~/a$ touch file1  
yogi@DESKTOP-GA5AC52:~/a$ ls  
file1  
yogi@DESKTOP-GA5AC52:~/a$ cat > "hello world"  
helloworld  
^C  
yogi@DESKTOP-GA5AC52:~/a$ ls  
file1 'hello world'  
yogi@DESKTOP-GA5AC52:~/a$ echo 'hello wworld'>file1  
yogi@DESKTOP-GA5AC52:~/a$ ls  
file1 'hello world'  
yogi@DESKTOP-GA5AC52:~/a$ rm 'hello world'  
yogi@DESKTOP-GA5AC52:~/a$ ls  
file1  
yogi@DESKTOP-GA5AC52:~/a$ cat file1  
hello wworld  
yogi@DESKTOP-GA5AC52:~/a$ _
```

```
yogi@DESKTOP-GA5AC52:~/a$ file *  
file1: ASCII text  
yogi@DESKTOP-GA5AC52:~/a$ _
```

3

```

To run a command as administrator (user
See "man sudo_root" for details.

yogi@DESKTOP-GA5AC52:~$ cat -r file2
cat: invalid option -- 'r'
Try 'cat --help' for more information.
yogi@DESKTOP-GA5AC52:~$ cat file2
cat: file2: No such file or directory
yogi@DESKTOP-GA5AC52:~$ cd a
yogi@DESKTOP-GA5AC52:~/a$ cat file2
line1
line2
yogi@DESKTOP-GA5AC52:~/a$ tail -r file2
tail: invalid option -- 'r'
Try 'tail --help' for more information.
yogi@DESKTOP-GA5AC52:~/a$ tac file2
line2
line1
yogi@DESKTOP-GA5AC52:~/a$
```

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```

Try 'tail --help' for more information.
yogi@DESKTOP-GA5AC52:~/a$ tac file2
line2
line1
yogi@DESKTOP-GA5AC52:~/a$ touch file3
yogi@DESKTOP-GA5AC52:~/a$ cat file1 file2 > file3
yogi@DESKTOP-GA5AC52:~/a$ cat file3
hello wworld
line1
line2
yogi@DESKTOP-GA5AC52:~/a$
```

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```
line1
yogi@DESKTOP-GA5AC52:~/a$ touch file3
yogi@DESKTOP-GA5AC52:~/a$ cat file1 file2 > file3
yogi@DESKTOP-GA5AC52:~/a$ cat file3
hello wworld
line1
line2
yogi@DESKTOP-GA5AC52:~/a$ mkdir b c
yogi@DESKTOP-GA5AC52:~/a$ ls
b c file1 file2 file3
yogi@DESKTOP-GA5AC52:~/a$ mkdir d
yogi@DESKTOP-GA5AC52:~/a$ cp d c
cp: -r not specified; omitting directory 'd'
yogi@DESKTOP-GA5AC52:~/a$ ls
b c d file1 file2 file3
yogi@DESKTOP-GA5AC52:~/a$ cp -r d c
yogi@DESKTOP-GA5AC52:~/a$ rmdir d
yogi@DESKTOP-GA5AC52:~/a$ ls
b c file1 file2 file3
yogi@DESKTOP-GA5AC52:~/a$
```

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```
yogi@DESKTOP-GA5AC52:~/a$ mkdir d
yogi@DESKTOP-GA5AC52:~/a$ cp d c
cp: -r not specified; omitting directory 'd'
yogi@DESKTOP-GA5AC52:~/a$ ls
b c d file1 file2 file3
yogi@DESKTOP-GA5AC52:~/a$ cp -r d c
yogi@DESKTOP-GA5AC52:~/a$ rmdir d
yogi@DESKTOP-GA5AC52:~/a$ ls
b c file1 file2 file3
yogi@DESKTOP-GA5AC52:~/a$ cp file3 b
yogi@DESKTOP-GA5AC52:~/a$ cd b
yogi@DESKTOP-GA5AC52:~/a/b$ ls
file3
yogi@DESKTOP-GA5AC52:~/a/b$ mv file3 file0
yogi@DESKTOP-GA5AC52:~/a/b$ ls
file0
yogi@DESKTOP-GA5AC52:~/a/b$ mv file0 a
```

```

yogi@DESKTOP-GA5AC52:~/a/b$ ls
file0
yogi@DESKTOP-GA5AC52:~/a/b$ pwd
/home/yogi/a/b
yogi@DESKTOP-GA5AC52:~/a/b$ mv file0 ../file0
yogi@DESKTOP-GA5AC52:~/a/b$ ls
yogi@DESKTOP-GA5AC52:~/a/b$ cd ..
yogi@DESKTOP-GA5AC52:~/a$ ls
b c file0 file1 file2 file3
yogi@DESKTOP-GA5AC52:~/a$ _

```

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```

yogi@DESKTOP-GA5AC52:~$ whereis test
test: /usr/bin/test /usr/share/man/man1/test.1.gz
yogi@DESKTOP-GA5AC52:~$ locate test
Command 'locate' not found, but can be installed with:
sudo apt install plocate
yogi@DESKTOP-GA5AC52:~$ find -name "test"
./a/b/c/d/test
./test

```

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```

yogi@DESKTOP-GA5AC52:~/a$ echo -e '
> GREP(1)                                User Commands                                GREP(1)
>
> NAME
>     grep, egrep, fgrep, rgrep - print lines that match patterns
>
> SYNOPSIS
>     grep [OPTION...] PATTERNS [FILE...]
>     grep [OPTION...] -e PATTERNS ... [FILE...]
>     grep [OPTION...] -f PATTERN_FILE ... [FILE...]
>
> DESCRIPTION
>     grep searches for PATTERNS in each FILE. PATTERNS is one or more patterns separated by newline characters,
>     and grep prints each line that matches a pattern. Typically PATTERNS should be quoted when grep is used in a
>     shell command.
>
>     A FILE of "-" stands for standard input. If no FILE is given, recursive searches examine the working
>     directory, and nonrecursive searches read standard input.
>
> In add>     In addition, the variant programs egrep, fgrep and rgrep are the same as grep -E, grep -F, and grep -r,
>     respectively. These variants are deprecated, but are provided for backward compatibility.
>
> OPTIONS
>     Generic Program Information
>     --help Output a usage message and exit.
>
>     -V, --version
>         Output the version number of grep and exit.
>
>     Pattern Syntax' >>grepman.txt
yogi@DESKTOP-GA5AC52:~/a$ cat grepman.txt
GREP(1)                                User Commands                                GREP(1)
NAME
    grep, egrep, fgrep, rgrep - print lines that match patterns
SYNOPSIS
    grep [OPTION...] PATTERNS [FILE...]
    grep [OPTION...] -e PATTERNS ... [FILE...]
    grep [OPTION...] -f PATTERN_FILE ... [FILE...]

```

```

> ^C
yogi@DESKTOP-GA5AC52:~/a$ grep 'FILE' grepman.txt
    grep [OPTION...] PATTERNS [FILE...]
    grep [OPTION...] -e PATTERNS ... [FILE...]
    grep [OPTION...] -f PATTERN_FILE ... [FILE...]
    grep searches for PATTERNS in each FILE. PATTERNS is one or more patterns separated by newline characters,
    A FILE of "-" stands for standard input. If no FILE is given, recursive searches examine the working
yogi@DESKTOP-GA5AC52:~/a$ _

```

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```
LS: command not found
yogi@DESKTOP-GA5AC52:~/a$ ls
b c file0 file1 file2 file3 grepman.txt
yogi@DESKTOP-GA5AC52:~/a$ rmdir b
rmdir: failed to remove 'b': Directory not empty
yogi@DESKTOP-GA5AC52:~/a$ rm -r b
yogi@DESKTOP-GA5AC52:~/a$ ls
c file0 file1 file2 file3 grepman.txt
yogi@DESKTOP-GA5AC52:~/a$
```

```
yogi@DESKTOP-GA5AC52:~/a$ find . -name file -exec rm {} \;
yogi@DESKTOP-GA5AC52:~/a$ ls
c file0 file1 file2 file3 grepman.txt
yogi@DESKTOP-GA5AC52:~/a$ find . -type f -name file\* -delete
yogi@DESKTOP-GA5AC52:~/a$ ls
c grepman.txt
yogi@DESKTOP-GA5AC52:~/a$
```

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```
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/Downloads$ gunzip Filez.tar.gz
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/Downloads$ cat Filez
Filez/      Filez.tar
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/Downloads$ cd Filez
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/Downloads/Filez$ ls
Flag.txt
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/Downloads/Filez$ cat Flag.txt
MW91IEZvdW5kIFRoZSBGbGFuLg==
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/Downloads/Filez$ --decode Flag.txt
--decode: command not found
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/Downloads/Filez$ base64 --decode Flag.txt
You Found The Flag.yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/Downloads/Filez$ base64 --decode Flag.txt
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/Downloads/Filez$
```

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```
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop$ cd Pentest/
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ wget https://blog.bi0s.in/assets/logo.png
--2022-11-06 14:42:18-- https://blog.bi0s.in/assets/logo.png
Resolving blog.bi0s.in (blog.bi0s.in)... 172.67.160.22, 104.21.14.171, 2606:4700:3034::6815:eab, ...
Connecting to blog.bi0s.in (blog.bi0s.in)|172.67.160.22|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 22693 (22K) [image/png]
Saving to: 'logo.png'
```

```
logo.png
=====>] 22.16K 3.51KB/s in 8.6s
100%[=====]
2022-11-06 14:42:32 (2.57 KB/s) - 'logo.png' saved [22693/22693]
```

```
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ curl https://blog.bi0s.in/assests/logo.png --output logoc.png
% Total % Received % Xferd Average Speed Time Time Time Current
Dload Upload Total Spent Left Speed
100 4580 0 4580 0 0 4958 0 --:--:-- --:--:-- --:--:-- 4962
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$
```

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```
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ ping -c 5 Google.com
PING Google.com (142.250.76.206) 56(84) bytes of data.
64 bytes from bom12s10-in-f14.1e100.net (142.250.76.206): icmp_seq=1 ttl=57 time=601 ms
64 bytes from bom12s10-in-f14.1e100.net (142.250.76.206): icmp_seq=2 ttl=57 time=111 ms
64 bytes from bom12s10-in-f14.1e100.net (142.250.76.206): icmp_seq=3 ttl=57 time=168 ms
64 bytes from bom12s10-in-f14.1e100.net (142.250.76.206): icmp_seq=4 ttl=57 time=769 ms
64 bytes from bom12s10-in-f14.1e100.net (142.250.76.206): icmp_seq=5 ttl=57 time=77.4 ms

--- Google.com ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4005ms
rtt min/avg/max/mdev = 77.421/345.418/769.069/283.986 ms
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$
```

```
ping: Google.com: temporary failure in name resolution
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ ping -c 6 Google.com
PING Google.com (142.250.193.110) 56(84) bytes of data.
64 bytes from maa05s24-in-f14.1e100.net (142.250.193.110): icmp_seq=1 ttl=56 time=75.1 ms
64 bytes from maa05s24-in-f14.1e100.net (142.250.193.110): icmp_seq=2 ttl=56 time=78.1 ms
64 bytes from maa05s24-in-f14.1e100.net (142.250.193.110): icmp_seq=3 ttl=56 time=53.5 ms
64 bytes from maa05s24-in-f14.1e100.net (142.250.193.110): icmp_seq=4 ttl=56 time=118 ms
64 bytes from maa05s24-in-f14.1e100.net (142.250.193.110): icmp_seq=5 ttl=56 time=156 ms
64 bytes from maa05s24-in-f14.1e100.net (142.250.193.110): icmp_seq=6 ttl=56 time=133 ms

--- Google.com ping statistics ---
6 packets transmitted, 6 received, 0% packet loss, time 5007ms
rtt min/avg/max/mdev = 53.478/102.279/155.865/36.018 ms
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$
```

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```

                This is an OverTheWire game server.
                More information on http://www.overthewire.org/wargames

!!! You are trying to log into this SSH server on port 22, which is not intended.

bandit@bandit.labs.overthewire.org: Permission denied (publickey).
bandit0@bandit:~$ ls
readme
bandit0@bandit:~$ cat readme
NH2SXQwcBdpmTEzi3bvBHMM9H66vVXjL
bandit0@bandit:~$
```

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```
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ nc 127.0.0.1 1234
can i talk now?
yess absolutely!!!

Select yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest
Trying 127.0.0.1...
telnet: Unable to connect to remote host: Connection refused
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ nc -nvlp 1234
Listening on 0.0.0.0 1234
Connection received on 127.0.0.1 47330
can i talk now?
yess absolutely!!!
```

```
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ nc -l -p 8000 < file.txt
```

```
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ nc -l -p 8000 > file.txt
^Z
[1]+  Stopped                  nc -l -p 8000 > file.txt
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ cd ..
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop$ nc -l -p 8000 > file.txt
^Z
[2]+  Stopped                  nc -l -p 8000 > file.txt
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop$ ls
'30 DAY CHALLENGE.pdf'      Pentest      'lab1 dbm
New folder (2)              'New folder (2)'  'New folder (2)'
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop$ cat file.txt
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop$ ls | grep file.txt
file.txt
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop$
```

## Shell scripting

1

```
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ #!/bin/bash
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ echo "enter first number"
enter first number
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ read num1
10
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ echo "enter second number"
enter second number
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ read num2
5
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ echo "1.Addition"
1.Addition
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ echo "2.Subtraction"
2.Subtraction
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ echo "3.Multiplication"
3.Multiplication
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ echo "4.Division"
4.Division
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ read choice
1
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ case $choice in
> 1)sum=$(echo " $num1 + $num2")
> echo "Addition is =" $sum;;
> 2)sum=$(echo "$num1 - $num2")
> echo "Sub is =" $sum;;
> 3)sum=$(echo "$num1 * $num2")
> echo "Mul is =" $sum;;
> 4)sum=$(echo "$num1 / $num2")
> echo "div is =" $sum;;
> *)echo "invalid choice"
> esac
Addition is = 10 + 5
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$
```

2

```
yogi@DESKTOP-GA5AC52: /mnt/c/Users/USER/OneDrive/Desktop/Pentest
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ #!/bin/sh
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ echo "Enter a word for encoding"
Enter a word for encoding
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ read word
HELLO
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ echo "You entered = $word"
You entered = HELLO
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ echo "choose ( 1 ) for ROT13 Encode"
choose ( 1 ) for ROT13 Encode
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ echo "choose ( 2 ) for ROT13 Decode"
choose ( 2 ) for ROT13 Decode
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ read choice
1
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ case $choice in
> 1)echo "$word" | rot13 ;;
> 2)echo "$word" | rot13 ;;
> *)echo "invalid choice"
> esac
URYyb
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ _
```

3

```
yogi@DESKTOP-GA5AC52: /mnt/c/Users/USER/OneDrive/Desktop/Pentest
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ #/bin/bash
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ now=$(date +"%d%m")
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ echo "$now"
0911
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ ls
file.txt leapyear.py logo.png logoc.png zeppelin
mv: cannot stat file.txt: No such file or directory
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ mv ../file.txt ${now}.txt
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ ls
0911.txt leapyear.py logo.png logoc.png zeppelin
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$
```

4

```
yogi@DESKTOP-GA5AC52: /mnt/c/Users/USER/OneDrive/Desktop/Pentest
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ #/bin/bash
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ arr=(5 99 7 2 88)
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ echo "array : " ${arr[*]}
array : 5 99 7 2 88
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ for ((i = 0; i<5; i++))
> do
> for((j = 0; j<5-i-1; j++))
> do
> if [ ${arr[j]} -gt ${arr[${j+1}]} ]
> then
> temp_var=${arr[j]}
> arr[j]=${arr[${j+1}]}
> arr[${j+1}]=$temp_var
> fi
> done
> done
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ echo "sorted array : ${arr[*]}"
sorted array : 2 5 7 88 99
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ _
```



```
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ #!/bin/bash
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ echo "Enter a String"
Enter a String
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ read str
amma
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ len=${#str}
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ for (( i=$len-1; i>=0; i-- ))
> do
> reverse="$reverse${input:$i:1}"
> done
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ if [ $input == $reverse ]
> then
> echo "$input is palindrome"
> else
> echo "$str is not palindrome"
> fi
is palindrome
yogi@DESKTOP-GA5AC52:/mnt/c/Users/USER/OneDrive/Desktop/Pentest$ _
```