

1. How i can see from command prompt that on which directory you are ?
 - **PWD**
2. How i can change permission of file to read only for that user ?
 - **chmod u+r <filename>**
3. how i can create new user ?
 - **Useradd <username>**
4. how i can install mysql in ubuntu ?
 - **sudo apt-get install mysql**
5. How i can set insert mode on VI editor ? And how i can save data in file using VI editor ?
 - **Press 'i' for insert mode and press ':w' to save data in file.**
6. if i want to search from history of command then which short cut i can use ?
 - **Using UP-ARROW key**
7. Write a command which gives me running mysql process and its pid
 - **ps | grep mysql**
8. which command helps me to copy file from my local machine to remote machine ? Give one example
 - **scp for.sh nasit@rapidadmin-desktop:/bin/**
9. Write a command that will display all .txt files, including its individual permission.
 - **ls -l | grep ".txt" OR ls -l *.txt**
10. How can i terminate all process at once ?
 - **killall**
11. how i can get first 10 lines of any file ?
 - **head <filename>**
12. how i can know free space on disk ?
 - **free -h**
13. write command which remove folder from my machine.
 - **rmdir**
14. Which command helps me to search contents of a file for particular pattern ?
 - **grep**
15. Write command to display current date in the form dd/mm/yyyy.
 - **date "+%d/%m/%Y"**
16. how i can remove all lines from file ? (without removing that file)
 - **truncate -s 0 <filename>**
 - **Overwrite the file using cat (for example: cat > <filename)**
 - **In command mode of vi editor press ":1,\$d"**
17. The permission rwxr—r— represented in octal expression will be ?
 - A. 777
 - B. 511
 - C. 744
 - D. 711
18. Which command can be use for change user password ?
 - **passwd**

19. how and where i can set test.rapidops.com against localhost ?

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20. Create file and set its group as root

- `touch <filename>`
- `Chgrp root <filename>`

Linux Exercise

1. Write a shell script that adds an extension “.new” to all the files in the directory.

`#!/bin/bash`

```
changeExt(){  
    for i in "$1"/* ; do  
        mv $i $i.new  
    done  
}
```

`changeExt .`

2. Delete file which has special characters. “ -“, “ —“, “*“, “\$”

`#!/bin/bash`

```
remFile(){  
    for i in ./*  
    do  
        if [ -f $i ] ; then  
            value=`echo "$i" | cut -c 3-`  
            if [[ ( $value == *[-]* ) || ( $value == *[*]* ) || ( $value == *[*]* ) || ( $value ==  
*[\$]* ) ]] ; then  
                echo "Removed: $value"  
                rm $value  
            fi  
            #echo "$i file"  
        fi  
    done  
}  
remFile
```

3. Write a shell script that take two input numbers from user at runtime and display arithmetic operation on that numbers, find out max, & min number from them, find weather that numbers negative or positive.

```
#!/bin/bash
```

```
read -p "Enter input 1: " ip1
```

```
read -p "Enter input 2: " ip2
```

```
echo "\nArithmetic Operations are :\n"
```

```
echo "Addition is "$(( $ip1 + $ip2 ));
```

```
echo "Substraction is "$(( $ip1 - $ip2 ));
```

```
echo "Multiplication is "$(( $ip1 * $ip2 ))
```

```
echo "Division is "$(( $ip1 / $ip2 ))
```

```
echo "Remaider is "$(( $ip1 % $ip2 ))
```

```
echo "\n"
```

```
if [ $ip1 -gt $ip2 ] ; then
```

```
    echo "$ip1 is Maximum"
```

```
    echo "$ip2 is Minimum"
```

```
else
```

```
    echo "$ip2 is Maximum"
```

```
    echo "$ip1 is Minimum"
```

```
fi
```

```
if [ $ip1 -eq $ip2 ] ; then
```

```
    echo "$ip1 and $ip2 are equal"
```

```
else
```

```
    echo "$ip1 and $ip2 are not equal"
```

```
fi
```

```
if [ $ip1 -gt 0 ] ; then
```

```
    echo "$ip1 is Positive"
```

```
else
```

```
    echo "$ip1 is Negative"
```

```
fi
```

```
if [ $ip2 -gt 0 ] ; then
```

```
    echo "$ip2 is Positive"
```

```
else
```

```
    echo "$ip2 is Negative"
```

```
fi
```

4. Write a shell script that take one input number from user and print 1 to n number using three loops (For, while, until). (N = entered number)

```
#!/bin/bash
```

```
read -p " Enter number : " n
```

```
echo "Using for Loop"
```

```
for i in $(seq 0 $n) ; do
    echo $i
done
```

```
echo "Using While Loop"
```

```
i=0
while [ $i -le $n ] ; do
    echo $i
    i=$(( $i+1 ))
done
```

```
echo "Using Until Loop"
```

```
i=0
until [ $i -ge $n ] ; do
    echo $i
    i=$(( $i+1 ))
done
```

5. Write a shell script to display the last updated file of the newest file in a directory.

```
#!/bin/bash
```

```
echo `ls -pt | grep -v / | head -1`
```

6. Write a shell script to get the total count of the word "Linux" in all the ".txt" files and also across files present in subdirectories.

```
#!/bin/bash
```

```
matches=$(grep -ro "a" * | wc -l)
echo "Total matches: $matches"
```

7. Write a shell script that copy all the directories, subdirectories and files from one location to another specific location.

```
#!/bin/bash
```

```
cp * $1
```

8. Display specific number of lines as follow:

1. Display first and last 10 lines of file contains
2. Display line no. 3 to 8 from file contains.
3. Display 7 lines and start from second last line in reverse manner.

```
#!/bin/bash
```

```
echo "All Lines "`cat sample`
```

```
echo "First 10 Lines : "`head sample`
```

```
echo "Last 10 Lines : "`tail sample`
```

```
echo "Line 3-8 : "`head -8 sample | tail -5`
```

```
echo "7 Lines from Last Second Line : "`tail -8 sample | head -7 | tac`
```

9. Perform following task:

1. Add two new users and two groups
2. Login as one user and then create new file
3. Send created file from one user to another user
4. Login as second user and copy that file from user2 to user1(in same system)

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10. Ex. 10 Task to find all files from folder where file contains string 'abc'

```
#!/bin/bash
```

```
grep -rnwl "abc" *
```