

Bash scripts can be used for various purposes,

such as executing a shell command, running multiple commands together, customizing administrative tasks, performing task automation etc.

So knowledge of bash programming basics is important for every Linux user.

```
cat /etc/shells
```

```
which bash
```

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

```
echo "raham" > file.txt
```

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

```
count=10
```

```
if [$count -eq 10]
```

```
then
```

```
echo "true"
```

```
fi
```

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

```
n=10
```

```
if [ $n -lt 10 ];
```

```
then
```

```
echo "It is a one digit number"
```

```
else
```

```
echo "It is a two digit number"
```

```
fi
```

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

```
echo "Printing text with newline"
```

```
echo -e "\nRemoving \t backslash \t characters\n"
```

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

```
# Add two numeric value
```

```
((sum=25+35))
```

```
#Print the result
```

```
echo $sum
```

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

```
:'
```

The following script calculates
the square value of the number, 5.

```
,
```

Or

```
<< ///
```

The following script calculates
the square value of the number, 5

```
///
```

```
((area=10*5))
```

```
echo $area
```

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

```
valid=true
```

```
count=1
```

```
while [ $valid ]
```

```
do
```

```
echo $count
```

```
if [ $count -eq 5 ];
```

```
then
```

```
break
```

```
fi
```

```
((count++))
```

```
done
```

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

```
echo "Enter Your Name"
```

```
read name
```

```
echo "Welcome $name"
```

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

```
echo "Enter username"
```

```
read username
```

```
echo "Enter password"
```

```
read password
```

```
if [[ ( $username == "raham" && $password == "1234" ) ]]; then
```

```
echo "valid user"
```

```
else
```

```
echo "invalid user"
```

```
fi
```

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

```
echo "Enter your lucky number"
```

```
read n
```

```
if [ $n -eq 101 ];
```

```
then
```

```
echo "You got 1st prize"
```

```
elif [ $n -eq 510 ];
```

```
then
```

```
echo "You got 2nd prize"
```

```
elif [ $n -eq 999 ];
```

```
then
```

```
echo "You got 3rd prize"
```

```
else
```

```
echo "Sorry, try for the next time"
```

```
fi
```

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

```
echo "Enter your lucky number"
```

```
read n
```

```
if [ $n -eq 101 ];
```

```
then
```

```
echo "You got 1st prize"
```

```
elif [ $n -eq 510 ];
```

```
then
```

```
echo "You got 2nd prize"
```

```
elif [ $n -eq 999 ];
```

```
then
```

```
echo "You got 3rd prize"
```

```
else
```

```
echo "Sorry, try for the next time"
```

```
fi
```

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

```
echo "Total arguments : $#"
```

```
echo "1st Argument = $1"
```

```
echo "2nd argument = $2"
```

```
./filename Redhat ubuntu fedora centos
```

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

```
string1="Linux"
```

```
string2="unix"
```

```
echo "$string1$string2"
```

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

```
echo "Enter directory name"
```

```
read newdir
```

```
mkdir $newdir
```

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

```
echo "Enter filename"
```

```
read a
```

```
touch $a
```

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

```
echo "Enter directory name"
```

```
read ndir
```

```
if [ -d "$ndir" ]
```

```
then
```

```
echo "Directory exist"
```

```
else
```

```
`mkdir $ndir`
```

```
echo "Directory created"
```

```
fi
```

```
#!/bin/bash
echo "Enter filename to remove"
read fn
rm -i $fn
```

CRONTAB EXAMPLES:

```
* * * * * lscpu >> /tmp/cpuinfo
* * * * * lsmem >> /tmp/abc.txt
```

Script to delete files with are older than 60 days:

```
#!/bin/bash
find /opt/ -type f -mtime +30
echo "im deleting the files"
find /opt/ -type f -mtime +30 -delete
```

delete only .txt files on abc folder

command to modify the file times: touch -t 202208311530 * (The “-t” option modifies the time stamp of the file and the format is YYYYMMDDHHMM.)

```
find /root/abc -name "*.txt" -type f -mtime +30
echo "im deleting files with are older than 30 days"
find /root/abc -name "*.txt" -type f -mtime +30 -delete
```

```
1 wget https://releases.jfrog.io/artifactory/artifactory-rpms/artifactory-rpms.repo -O jfrog-artifactory-rpms.repo
```

```
3 mv jfrog-artifactory-rpms.repo /etc/yum.repos.d/
```

```
4 yum update -y
```

```
5 yum install jfrog-artifactory-oss -y
```

```
6 systemctl start artifactory.service
```

```
7 systemctl status artifactory.service
```

```
8 cd /opt/jfrog/artifactory/
```

```
9 ll
10 ls var/
11 cd var/log/
12 ll
13 cat console.log
14 cat console.log | grep -i error
15 cat console.log | grep -i warn
16 history
```

NEXUS:

NEXUS:

1 cpu and 2 gb of ram
22 and 8081 port
Openjdk8

NEXUS SETUP:

```
1 sudo yum update -y
2 sudo yum install wget -y
3 sudo yum install java-1.8.0-openjdk.x86_64 -y
4 sudo mkdir /app && cd /app
5 sudo wget -O nexus.tar.gz https://download.sonatype.com/nexus/3/latest-unix.tar.gz
6 ll
7 sudo tar -xvf nexus.tar.gz
8 ll
9 sudo mv nexus-3* nexus
10 sudo adduser nexus
11 sudo chown -R nexus:nexus /app/nexus
12 sudo chown -R nexus:nexus /app/sonatype-work
```

13 sudo vi /app/nexus/bin/nexus.rc

run_as_user="nexus"

14 sudo vi /app/nexus/bin/nexus.vmoptions

15 sudo vi /etc/systemd/system/nexus.service

[Unit]

Description=nexus service

After=network.target

[Service]

Type=forking

LimitNOFILE=65536

User=nexus

Group=nexus

ExecStart=/app/nexus/bin/nexus start

ExecStop=/app/nexus/bin/nexus stop

User=nexus

Restart=on-abort

[Install]

WantedBy=multi-user.target

16 sudo chkconfig nexus on

17 sudo systemctl start nexus

18 systemctl status nexus.service

19 sudo systemctl enable nexus

20 systemctl status nexus.service

21 history

JENKINS SETUP:

```
sudo wget -O /etc/yum.repos.d/jenkins.repo https://pkg.jenkins.io/redhat-stable/jenkins.repo
```

```
sudo rpm --import https://pkg.jenkins.io/redhat-stable/jenkins.io.key
```

```
amazon-linux-extras install java-openjdk11 -y
```

```
yum install jenkins -y && systemctl restart jenkins
```

```
yum install java-1.8.0-openjdk -y
```

```
yum install maven -y
```

```
yum install git -y
```

Vim /etc/maven/settings.xml (line-119)

```
<server>
```

```
<id>nexusRepo</id>
```

```
<username>admin</username>
```

```
<password>Mashalla</password>
```

```
</server>
```