2) Execute all scripts shown in video and capture the screenshots.

```
my pc@DESKTOP-N34K8JC MINGW64 ~/Downloads
$ ssh -i linux-test.pem ec2-user@54.164.179.117
Last login: Tue May 27 23:03:16 2025 from 103.143.169.218

    ,       #_
   ~\_   ####_          Amazon Linux 2
  ~~  \_#####\
  ~~      \###|          AL2 End of Life is 2026-06-30.
  ~~      \#/ ___
   ~~      V~' '->
    ~~~        /         A newer version of Amazon Linux is available!
     ~~._.   _/
       _/ _/             Amazon Linux 2023, GA and supported until 2028-03-15.
     _/m/'                  https://aws.amazon.com/linux/amazon-linux-2023/
```

```
[ec2-user@ip-172-31-25-203 ~]$ sudo su
[root@ip-172-31-25-203 ec2-user]# vi test
[root@ip-172-31-25-203 ec2-user]# ll
total 4
-rw-r--r-- 1 root root 30 May 29 09:13 test
[root@ip-172-31-25-203 ec2-user]# chmod 777 test
[root@ip-172-31-25-203 ec2-user]# ./test
              total        used        free      shared  buff/cache
 available
Mem:            952         185         311           0         455
       622
Swap:             0           0           0
UID       PID  PPID  C STIME TTY          TIME CMD
root        1     0  0 May26 ?        00:00:20 /usr/lib/systemd/syst
root        2     0  0 May26 ?        00:00:00 [kthreadd]
root        3     2  0 May26 ?        00:00:00 [rcu_gp]
root        4     2  0 May26 ?        00:00:00 [rcu_par_gp]
```

```
[root@ip-172-31-25-203 ec2-user]# df
Filesystem      1K-blocks      Used Available Use% Mounted on
devtmpfs           478416         0    478416   0% /dev
tmpfs              487764         0    487764   0% /dev/shm
tmpfs              487764       464    487300   1% /run
tmpfs              487764         0    487764   0% /sys/fs/cgroup
/dev/xvda1        8376300   2273648   6102652  28% /
tmpfs               97556         0     97556   0% /run/user/1000
```

```
[root@ip-172-31-25-203 ec2-user]# ps -ef
UID       PID  PPID  C STIME TTY          TIME CMD
root        1     0  0 May26 ?        00:00:20 /usr/lib/systemd/syst
root        2     0  0 May26 ?        00:00:00 [kthreadd]
root        3     2  0 May26 ?        00:00:00 [rcu_gp]
root        4     2  0 May26 ?        00:00:00 [rcu_par_gp]
root        6     2  0 May26 ?        00:00:00 [kworker/0:0H-ev]
root        8     2  0 May26 ?        00:00:00 [mm_percpu_wq]
root        9     2  0 May26 ?        00:00:00 [rcu_tasks_rude_]
root       10     2  0 May26 ?        00:00:00 [rcu_tasks_trace]
root       11     2  0 May26 ?        00:00:06 [ksoftirqd/0]
root       12     2  0 May26 ?        00:00:05 [rcu_sched]
root       13     2  0 May26 ?        00:00:01 [migration/0]
root       15     2  0 May26 ?        00:00:00 [cpuhp/0]
```

```
[root@ip-172-31-25-203 ec2-user]# # echo $0
[root@ip-172-31-25-203 ec2-user]# echo $0
bash
[root@ip-172-31-25-203 ec2-user]# cat /etc/shells
/bin/sh
/bin/bash
/usr/bin/sh
/usr/bin/bash
/bin/tcsh
/bin/csh
```

```
[root@ip-172-31-25-203 ec2-user]# cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
bin:x:1:1:bin:/bin:/sbin/nologin
daemon:x:2:2:daemon:/sbin:/sbin/nologin
adm:x:3:4:adm:/var/adm:/sbin/nologin
lp:x:4:7:lp:/var/spool/lpd:/sbin/nologin
sync:x:5:0:sync:/sbin:/bin/sync
shutdown:x:6:0:shutdown:/sbin:/sbin/shutdown
halt:x:7:0:halt:/sbin:/sbin/halt
mail:x:8:12:mail:/var/spool/mail:/sbin/nologin
operator:x:11:0:operator:/root:/sbin/nologin
games:x:12:100:games:/usr/games:/sbin/nologin
ftp:x:14:50:FTP User:/var/ftp:/sbin/nologin
nobody:x:99:99:Nobody:/:/sbin/nologin
```

```
[root@ip-172-31-25-203 ec2-user]# sh
sh-4.2# echo $0
sh
sh-4.2# exit
exit
[root@ip-172-31-25-203 ec2-user]# csh
[root@ip-172-31-25-203 ec2-user]# echo $0
csh
[root@ip-172-31-25-203 ec2-user]# csh
[root@ip-172-31-25-203 ec2-user]# echo $0
csh
[root@ip-172-31-25-203 ec2-user]# ksh
ksh: Command not found.
[root@ip-172-31-25-203 ec2-user]# bash
[root@ip-172-31-25-203 ec2-user]# echo $0
bash
```

```
[root@ip-172-31-25-203 ec2-user]# pwd
/home/ec2-user
[root@ip-172-31-25-203 ec2-user]# mkdir -p /sushma/scripts
[root@ip-172-31-25-203 ec2-user]# cd /sushma/scripts
[root@ip-172-31-25-203 scripts]#
[root@ip-172-31-25-203 scripts]#
[root@ip-172-31-25-203 scripts]#
[root@ip-172-31-25-203 scripts]#
[root@ip-172-31-25-203 scripts]#
[root@ip-172-31-25-203 scripts]#
[root@ip-172-31-25-203 scripts]# ls
[root@ip-172-31-25-203 scripts]# pwd
/sushma/scripts
```

```
/sushma/scripts
[root@ip-172-31-25-203 scripts]# vi hello
[root@ip-172-31-25-203 scripts]# ll
total 4
-rwxrwxrwx 1 root root 29 May 29 12:25 hello
```

```
[root@ip-172-31-25-203 scripts]# pwd
/sushma/scripts
[root@ip-172-31-25-203 scripts]# ll
total 4
-rwxrwxrwx 1 root root 29 May 29 12:25 hello
[root@ip-172-31-25-203 scripts]# cd
[root@ip-172-31-25-203 ~]# pwd
/root
[root@ip-172-31-25-203 ~]# /sushma/scripts/hello
hello world
```

```
[root@ip-172-31-25-203 scripts]# pwd
/sushma/scripts
[root@ip-172-31-25-203 scripts]# ll
total 4
-rwxrwxrwx 1 root root 29 May 29 12:25 hello
[root@ip-172-31-25-203 scripts]# cat hello
#!/bin/bash
echo hello world
[root@ip-172-31-25-203 scripts]# mv hello hell.bash
[root@ip-172-31-25-203 scripts]# ll
total 4
-rwxrwxrwx 1 root root 29 May 29 12:25 hell.bash
```

```
[root@ip-172-31-25-203 scripts]# vi abc.bash
[root@ip-172-31-25-203 scripts]# ll
total 8
-rw-r--r-- 1 root root 22 May 29 13:12 abc.bash
-rwxrwxrwx 1 root root 29 May 29 12:25 hell.bash
[root@ip-172-31-25-203 scripts]# ./abc.bash
bash: ./abc.bash: Permission denied
[root@ip-172-31-25-203 scripts]# bash abc.bash
abc
[root@ip-172-31-25-203 scripts]# chmod 755 abc.bash
[root@ip-172-31-25-203 scripts]# ./abc.bash
abc
```

```
[root@ip-172-31-25-203 scripts]# vi hello.bash
[root@ip-172-31-25-203 scripts]# ll
total 12
-rwxr-xr-x 1 root root  22 May 29 13:12 abc.bash
-rwxrwxrwx 1 root root  29 May 29 12:25 hell.bash
-rw-r--r-- 1 root root 108 May 29 13:40 hello.bash
[root@ip-172-31-25-203 scripts]# ./hello.bash
bash: ./hello.bash: Permission denied
[root@ip-172-31-25-203 scripts]# ./hell.bash
hello world
[root@ip-172-31-25-203 scripts]# cat hell.bash
#!/bin/bash
echo hello world
```

```
[root@ip-172-31-25-203 scripts]# vi hell.bash
[root@ip-172-31-25-203 scripts]# ./hell.bash
hello
[root@ip-172-31-25-203 scripts]#
[root@ip-172-31-25-203 scripts]# cat hell.bash
#!/bin/bash
#purpose: Testing script fromat
#date: 29/5/2025
#modification: 29/5/2025

a='hello'
echo $a
```

```
[root@ip-172-31-25-203 scripts]# vi hell.bash
[root@ip-172-31-25-203 scripts]# ./hell.bash
hello devops
[root@ip-172-31-25-203 scripts]# cd /sushma/scripts
[root@ip-172-31-25-203 scripts]# ll
total 12
-rwxr-xr-x 1 root root  22 May 29 13:12 abc.bash
-rwxrwxrwx 1 root root 114 May 29 14:01 hell.bash
-rw-r--r-- 1 root root 108 May 29 13:40 hello.bash
[root@ip-172-31-25-203 scripts]# rm -rf *
[root@ip-172-31-25-203 scripts]# ls
```

```
[root@ip-172-31-25-203 scripts]# vi helloworld.bash
[root@ip-172-31-25-203 scripts]# ll
total 4
-rw-r--r-- 1 root root 107 May 29 14:18 helloworld.bash
[root@ip-172-31-25-203 scripts]# chmod 755 helloworld.bash
[root@ip-172-31-25-203 scripts]# ./helloworld.bash
hello world
[root@ip-172-31-25-203 scripts]# vi helloworld.bash
[root@ip-172-31-25-203 scripts]# ./helloworld.bash

hello world
```

```
[root@ip-172-31-25-203 scripts]# vi commands.bash
[root@ip-172-31-25-203 scripts]# chmod commands.bash
chmod: missing operand after 'commands.bash'
Try 'chmod --help' for more information.
[root@ip-172-31-25-203 scripts]# chmod 755 commands.bash
[root@ip-172-31-25-203 scripts]# ll
total 8
-rwxr-xr-x 1 root root  47 May 29 14:26 commands.bash
-rwxr-xr-x 1 root root 116 May 29 14:21 helloworld.bash
[root@ip-172-31-25-203 scripts]# ./commands.bash
/sushma/scripts
commands.bash  helloworld.bash
root
Thu May 29 14:27:42 UTC 2025
      May 2025
Su Mo Tu We Th Fr Sa
             1  2  3
 4  5  6  7  8  9 10
11 12 13 14 15 16 17
18 19 20 21 22 23 24
25 26 27 28 29 30 31

[root@ip-172-31-25-203 scripts]# cat commands.bash
#!/bin/bash
pwd
ls
whoami
date
cal
touch a b c
```

```
[root@ip-172-31-25-203 scripts]# pwd
/sushma/scripts
[root@ip-172-31-25-203 scripts]# ls
a   b   c   commands.bash   helloworld.bash
[root@ip-172-31-25-203 scripts]# whoami
root
[root@ip-172-31-25-203 scripts]# date
Thu May 29 14:29:14 UTC 2025
[root@ip-172-31-25-203 scripts]# cal
      May 2025
Su Mo Tu We Th Fr Sa
             1  2  3
 4  5  6  7  8  9 10
11 12 13 14 15 16 17
18 19 20 21 22 23 24
25 26 27 28 29 30 31
```

```
[root@ip-172-31-25-203 scripts]# vi commands.bash
[root@ip-172-31-25-203 scripts]# pwdi
bash: pwdi: command not found
[root@ip-172-31-25-203 scripts]# ./commands.bash
./commands.bash: line 2: pwdi: command not found
a  b  c  commands.bash  helloworld.bash
root
Thu May 29 14:31:01 UTC 2025
        May 2025
Su Mo Tu We Th Fr Sa
             1  2  3
 4  5  6  7  8  9 10
11 12 13 14 15 16 17
18 19 20 21 22 23 24
25 26 27 28 29 30 31

[root@ip-172-31-25-203 scripts]# vi commands.bash
[root@ip-172-31-25-203 scripts]# ./commands.bash
/sushma/scripts
a  b  c  commands.bash  helloworld.bash
root
Thu May 29 14:33:38 UTC 2025
        May 2025
Su Mo Tu We Th Fr Sa
             1  2  3
 4  5  6  7  8  9 10
11 12 13 14 15 16 17
18 19 20 21 22 23 24
25 26 27 28 29 30 31
```

```
[root@ip-172-31-25-203 scripts]# vi admin.bash
[root@ip-172-31-25-203 scripts]# chmod 755 admin.bash
[root@ip-172-31-25-203 scripts]# ./admin.bash
top - 14:46:05 up 3 days,  2:11,  1 user,  load average: 0.01, 0.03,
Tasks: 115 total,   1 running,  71 sleeping,   0 stopped,   0 zombie
%Cpu(s):  0.3 us,  0.6 sy,  0.0 ni, 95.8 id,  0.0 wa,  0.0 hi,  0.0 s
KiB Mem :   975528 total,   311632 free,   193864 used,   470032 buff
KiB Swap:        0 total,        0 free,        0 used.   632712 avai

   PID USER      PR  NI    VIRT    RES    SHR S %CPU %MEM     TIME+
  1725 root      20   0       0      0      0 S  0.3  0.0   0:52.45
 18225 root      20   0  168956   4500   3816 R  0.3  0.5   0:00.02
     1 root      20   0  189132   5716   4092 S  0.0  0.6   0:23.21
     2 root      20   0       0      0      0 S  0.0  0.0   0:00.00
     3 root       0 -20       0      0      0 I  0.0  0.0   0:00.00
     4 root       0 -20       0      0      0 I  0.0  0.0   0:00.00
     6 root       0 -20       0      0      0 I  0.0  0.0   0:00.00
     8 root       0 -20       0      0      0 I  0.0  0.0   0:00.00
     9 root      20   0       0      0      0 S  0.0  0.0   0:00.00
    10 root      20   0       0      0      0 S  0.0  0.0   0:00.00
    11 root      20   0       0      0      0 S  0.0  0.0   0:07.74
    12 root      20   0       0      0      0 I  0.0  0.0   0:05.99
    13 root      rt   0       0      0      0 S  0.0  0.0   0:01.18
    15 root      20   0       0      0      0 S  0.0  0.0   0:00.00
    17 root      20   0       0      0      0 S  0.0  0.0   0:00.00
    18 root       0 -20       0      0      0 I  0.0  0.0   0:00.00
```

```
[root@ip-172-31-25-203 scripts]# vi admin.bash
[root@ip-172-31-25-203 scripts]# ./admin.bash
top - 23:11:17 up 3 days, 10:36,  1 user,  load average: 0.03, 0.01,
Tasks: 111 total,   1 running,  68 sleeping,   0 stopped,   0 zombie
%Cpu(s):  6.2 us,  0.0 sy,  0.0 ni, 93.8 id,  0.0 wa,  0.0 hi,  0.0 s
KiB Mem :   975528 total,   309760 free,   189572 used,   476196 buff
KiB Swap:        0 total,        0 free,        0 used.   636896 avai

   PID USER      PR  NI    VIRT    RES    SHR S %CPU %MEM     TIME+
     1 root      20   0  189132   5716   4092 S  0.0  0.6   0:27.59
     2 root      20   0       0      0      0 S  0.0  0.0   0:00.00
     3 root       0 -20       0      0      0 I  0.0  0.0   0:00.00
Filesystem      Size  Used Avail Use% Mounted on
devtmpfs        468M     0  468M   0% /dev
tmpfs           477M     0  477M   0% /dev/shm
tmpfs           477M  464K  476M   1% /run
tmpfs           477M     0  477M   0% /sys/fs/cgroup
/dev/xvda1      8.0G  2.2G  5.9G  28% /
tmpfs            96M     0   96M   0% /run/user/1000
              total        used        free      shared  buff/cache
 available
Mem:            952         185         302           0         465
        621
Swap:             0           0           0
 23:11:17 up 3 days, 10:36,  1 user,  load average: 0.03, 0.01, 0.00
Linux 5.10.236-228.935.amzn2.x86_64 (ip-172-31-25-203.ec2.internal) 0
5/29/2025      _x86_64_       (1 CPU)

avg-cpu:  %user   %nice %system %iowait  %steal   %idle
           0.20    0.00    0.28    0.02    3.80   95.70

Device:           tps    kB_read/s    kB_wrtn/s    kB_read    kB_wrt
n
xvda             0.83         1.07         7.30     330134     225166
8
```

```
[root@ip-172-31-25-203 ~]# vi variables.bash
[root@ip-172-31-25-203 ~]# ./variables.bash
-bash: ./variables.bash: Permission denied
[root@ip-172-31-25-203 ~]# chmod 755 variables.bash
[root@ip-172-31-25-203 ~]# ./variables.bash
run variables tasks

/root
variables.bash
root
Thu May 29 23:40:17 UTC 2025
                        2025

        January                February                March
Su Mo Tu We Th Fr Sa    Su Mo Tu We Th Fr Sa    Su Mo Tu We Th Fr Sa
          1  2  3  4                        1                       1
 5  6  7  8  9 10 11     2  3  4  5  6  7  8     2  3  4  5  6  7  8
12 13 14 15 16 17 18     9 10 11 12 13 14 15     9 10 11 12 13 14 15
19 20 21 22 23 24 25    16 17 18 19 20 21 22    16 17 18 19 20 21 22
26 27 28 29 30 31       23 24 25 26 27 28       23 24 25 26 27 28 29
                                               30 31
         April                   May                   June
Su Mo Tu We Th Fr Sa    Su Mo Tu We Th Fr Sa    Su Mo Tu We Th Fr Sa
       1  2  3  4  5                 1  2  3     1  2  3  4  5  6  7
 6  7  8  9 10 11 12     4  5  6  7  8  9 10     8  9 10 11 12 13 14
13 14 15 16 17 18 19    11 12 13 14 15 16 17    15 16 17 18 19 20 21
20 21 22 23 24 25 26    18 19 20 21 22 23 24    22 23 24 25 26 27 28
27 28 29 30             25 26 27 28 29 30 31    29 30
         July                  August               September
Su Mo Tu We Th Fr Sa    Su Mo Tu We Th Fr Sa    Su Mo Tu We Th Fr Sa
       1  2  3  4  5                    1  2        1  2  3  4  5  6
 6  7  8  9 10 11 12     3  4  5  6  7  8  9     7  8  9 10 11 12 13
13 14 15 16 17 18 19    10 11 12 13 14 15 16    14 15 16 17 18 19 20
20 21 22 23 24 25 26    17 18 19 20 21 22 23    21 22 23 24 25 26 27
27 28 29 30 31          24 25 26 27 28 29 30    28 29 30
                        31
        October               November               December
Su Mo Tu We Th Fr Sa    Su Mo Tu We Th Fr Sa    Su Mo Tu We Th Fr Sa
          1  2  3  4                        1        1  2  3  4  5  6
 5  6  7  8  9 10 11     2  3  4  5  6  7  8     7  8  9 10 11 12 13
12 13 14 15 16 17 18     9 10 11 12 13 14 15    14 15 16 17 18 19 20
19 20 21 22 23 24 25    16 17 18 19 20 21 22    21 22 23 24 25 26 27
26 27 28 29 30 31       23 24 25 26 27 28 29    28 29 30 31
                        30
```

```
[root@ip-172-31-25-203 ~]# cat variables.bash
#!/bin/bash
#define variables


p=pwd
l=ls
wi=whoami
d=date
c='cal 2025'


echo run variables tasks
echo
$p
$l
$wi
$d
$c
```

```
[root@ip-172-31-25-203 ~]# vi input.bash
[root@ip-172-31-25-203 ~]# cat inpiut.bash
cat: inpiut.bash: No such file or directory
[root@ip-172-31-25-203 ~]# cat input.bsh
cat: input.bsh: No such file or directory
[root@ip-172-31-25-203 ~]# vi input.bash
[root@ip-172-31-25-203 ~]# cat input.bash
#!/bin/bash
echo hello ,my nam is sushma
echo
echo what is your name?
read name
echo
echo hello $name
echo
[root@ip-172-31-25-203 ~]# chmod 755 input.bash
[root@ip-172-31-25-203 ~]# ./input.bash
hello ,my nam is sushma

what is your name?
karthik

hello karthik
```

3) Execute all the scripts from below attached document.

```
COUNT=0

for INDEX in ${SERVERLIST[@]}; do
  echo "Processing Server: ${SERVERLIST[COUNT]}"
  COUNT="`expr $COUNT + 1`"
done
[root@ip-172-31-80-171 ec2-user]# chmod 755 arrayex.sh
[root@ip-172-31-80-171 ec2-user]# ./arrayex.sh
Processing Server: websrv01
Processing Server: websrv02
Processing Server: websrv03
Processing Server: websrv04
```

```
[root@ip-172-31-80-171 ec2-user]# vi checkargs.sh
[root@ip-172-31-80-171 ec2-user]# cat checkargs.sh
#!/bin/bash

if [ "$#" != "3" ]; then
  echo "USAGE: checkargs.sh [parm1] [parm2] [parm3]"
  exit 300
fi

echo "I live! I got what I needed!"
[root@ip-172-31-80-171 ec2-user]# chmod 755 checkargs.sh
[root@ip-172-31-80-171 ec2-user]# ./checkargs.sh
USAGE: checkargs.sh [parm1] [parm2] [parm3]
```

```
[root@ip-172-31-80-171 ec2-user]# vi cmdlinevar.sh
[root@ip-172-31-80-171 ec2-user]# cat cmdlinevar.sh
#!/bin/bash
# demo of command line values passed in with our shell script

USERNAME=$1
PASSWORD=$2
echo "The following Username is $USERNAME and Password is $PASSWORD"
[root@ip-172-31-80-171 ec2-user]# chmod 755 cmdlinevar.sh
[root@ip-172-31-80-171 ec2-user]# ./cmdlinevar.sh
The following Username is  and Password is
[root@ip-172-31-80-171 ec2-user]#
```

```
read MENUCHOICE

case $MENUCHOICE in
  1)
    echo "Congratulations for Choosing the First Option";;
  2)
    echo "Choice 2 Chosen";;
  3)
    echo "Last Choice Made";;
  *)
    echo "You chose unwisely";;

[root@ip-172-31-80-171 ec2-user]# chmod 755 casesample.sh
[root@ip-172-31-80-171 ec2-user]# ./casesample.sh
MAIN MENU
=========
1) Choice One
2) Choice Two
3) Choice Three

Enter Choice:
```