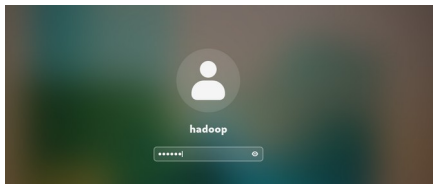1. Login with your userID

2. Find values of env variables
a. PATH

```
[student@mcalab3-17 ~]$ $PATH
bash: /usr/lib/jvm/java-1.8.0-openjdk-1:1.8.0.272.b10-0.fc31.x86_64/jre/bin:/home/student/Downloads/hadoop-3.3.6/bin:/home/student/Downloads/PIG/pig-0.17.0/bin:/home/student/Down
loads/hive_new/apache-hive-3.1.2-bin/bin:/home/student/Downloads/HBASE/hbase-2.5.8-bin/hbase-2.5.8/bin:/usr/lib/jvm/java-1.8.0-openjdk-1:1.8.0.272.b10-0.fc31.x86_64/jre/bin:/home
/student/Downloads/hadoop-3.3.6/bin:/home/student/Downloads/PIG/pig-0.17.0/bin:/home/student/Downloads/hive_new/apache-hive-3.1.2-bin/bin:/home/student/Downloads/HBASE/hbase-2.5.
8-bin/hbase-2.5.8/bin:/home/student/.local/bin:/home/student/bin:/usr/share/Modules/bin:/usr/local/bin:/usr/local/sbin:/usr/bin:/usr/sbin: No such file or directory
```

b. HOME

```
[student@mcalab3-17 ~]$ $HOME
bash: /home/student: Is a directory
```

c. SHELL

```
[student@mcalab3-17 ~]$ echo $SHELL
/bin/bash
```

3. Present Directory → **$PWD**

4. What are the directories under your home directory
[hadoop@fedora new]$ ls -d */
3/ one/ two/

5. What are the directories under the root directory
[hadoop@fedora ~]$ ls /
afs boot etc lib lost+found mnt proc run srv tmp var
bin dev home lib64 media   opt root sbin sys usr

6. Display the following content using echo command

```
[student@mcalab3-17 hello]$ echo -e "Welcome \n to \n linux lab \n linux is fun"
Welcome
 to
 linux lab
 linux is fun
```

7. Write Linux commands to perform the following tasks
a. Display today's date :
[hadoop@fedora ~]$ date
Wed Jul 23 01:16:23 AM EDT 2025

b. display calendar of June 2017

```
[student@mcalab3-17 hello]$ cal 12 2017
    December 2017
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
```

c. Display the calender of the months June and august 2015

```
[hadoop@fedora ~]$ cal 06 2015; cal 08 2015
     June 2015
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

    August 2015
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
[hadoop@fedora ~]$
```

d. Display the calendar for july 2018 with the starting day of the week as Monday

```
[hadoop@fedora ~]$ cal -m 07 2018
      July 2018
Mo Tu We Th Fr Sa Su
                   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
```

e. Display the current date and month
[hadoop@fedora ~]$ date +"%d %B"
23 July

f. To repeat your last command
[hadoop@fedora ~]$!-1
date +"%d %B"
23 July

g. To repeat the last command that begins with the letter C
[hadoop@fedora ~]$!c
cal
      July 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

h. write command to repeat last 3 commands
[hadoop@fedora ~]$!-3
ls -l | grep ^d | wc
   33   297   2059

I. who are the users working on the system
[hadoop@fedora ~]$ who
hadoop   seat0   2025-07-23 00:19 (login screen)
hadoop   tty2   2025-07-23 00:19 (tty2)

j. what is your username
[hadoop@fedora ~]$ whoami
hadoop

k. what is the flavour of linux you are working on
[hadoop@fedora ~]$ uname -a
Linux fedora 6.14.5-100.fc40.x86_64 #1 SMP PREEMPT_DYNAMIC Fri May 2 14:22:13 UTC 2025 x86_64 GNU/Linux

l. create user called tempuser with default home directory and default shell
[hadoop@fedora ~]$ sudo adduser tempuser1

m. create password for this user
[hadoop@fedora ~]$ sudo passwd tempuser1
New password:
Retype new password:
passwd: password updated successfully

n. delete the temp user
[hadoop@fedora ~]$ sudo userdel tempuser1
[sudo] password for hadoop:

o. Using command bc, calculate the value of the following expressions
I. (1456+234)/45
[hadoop@fedora ~]$ bc
bc 1.07.1
Copyright 1991-1994, 1997, 1998, 2000, 2004, 2006, 2008, 2012-2017 Free Software
Foundation, Inc.
This is free software with ABSOLUTELY NO WARRANTY.
For details type `warranty'.
(1456+234)/45
37

ii. Assign value 10 to var X, then increment by 1, Display the value after increment
change this run in bc only
[hadoop@fedora ~]$ X=10
[hadoop@fedora ~]$ ((X++))
[hadoop@fedora ~]$ echo $X
11