6th April 2021

Previous Day:-

- Computers, Programs, Programming
- Os, CUI/GUI, CUI is important
- How to use CUI? Terminal(Linux & Mac), Git Bash(Windows)
- Terminal Commands:-
  - ls (-a, -l)
  - pwd
  - mkdir
  - rmdir
  - Cd
  - Absolute and relative path(., .., ~, /)

Terminal-2

Lecture Flow:-

- Terminal commands:-
  - man(manual)
  - Touch
  - rm(remove)
  - Echo
  - cat
  - cp(copy & paste)
  - mv(cut & paste)
- MCQs

Topics & Explanation

Terminal commands:-

1. man (manual):-

Click here for reference link

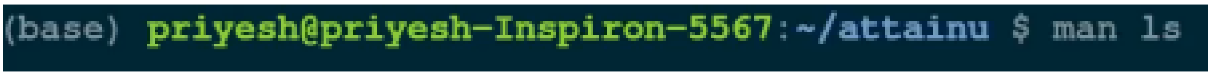
Concept

The "man" is a short term manual page. In unix-like operating systems such as linux, man is an interface to view the system's reference manual. A user can request to display a man page by simply typing man followed by a space and then argument.

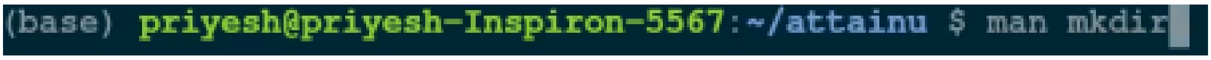
Syntax

man <command name>

Ex:-

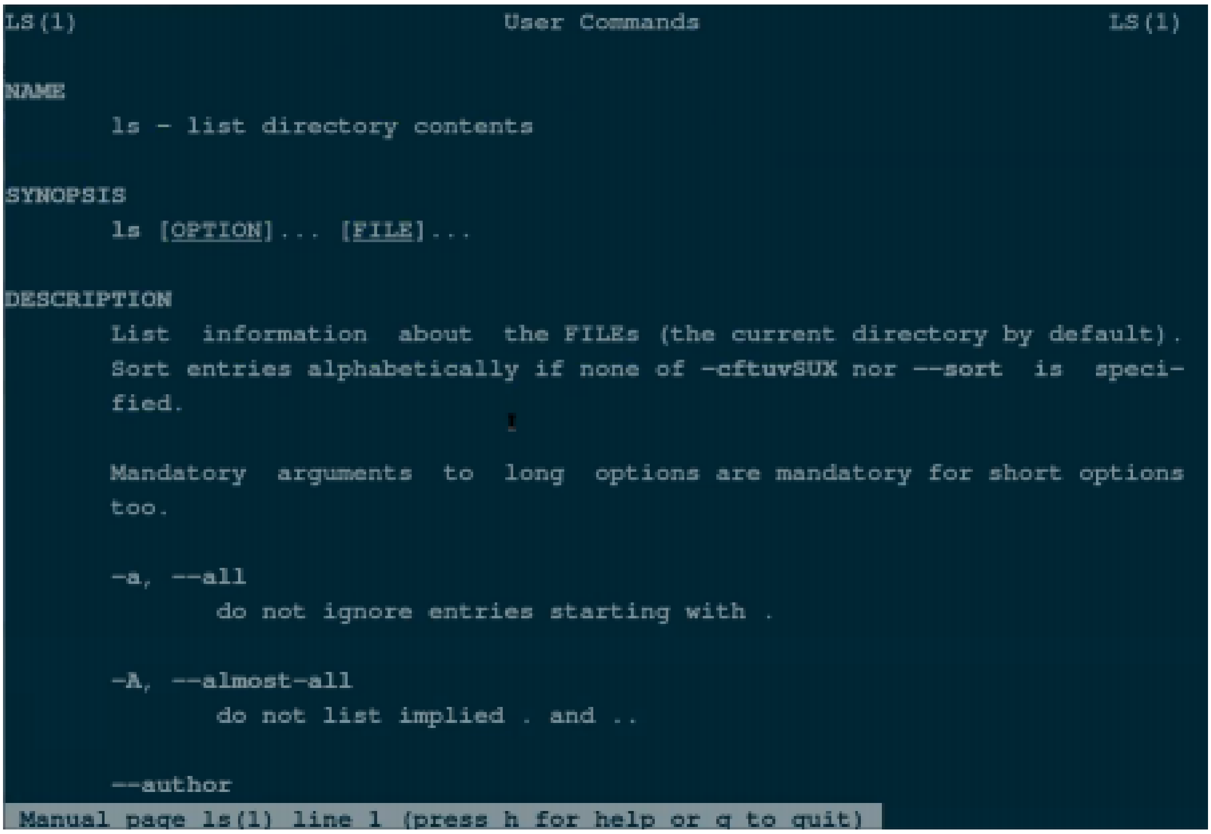


```
(base) priyesh@priyesh-Inspiron-5567:~/attainu $ man ls
```



```
(base) priyesh@priyesh-Inspiron-5567:~/attainu $ man mkdir
```

After entering the command you will get the following below screenshot.



```
LS(1)                          User Commands                          LS(1)

NAME
       ls - list directory contents

SYNOPSIS
       ls [OPTION]... [FILE]...

DESCRIPTION
       List  information  about  the FILEs (the current directory by default).
       Sort entries alphabetically if none of -cftuvSUX nor --sort  is  speci-
       fied.

       Mandatory  arguments  to  long  options are mandatory for short options
       too.

       -a, --all
              do not ignore entries starting with .

       -A, --almost-all
              do not list implied . and ..

       --author
 Manual page ls(1) line 1 (press h for help or q to quit)
```

A colon at the bottom displays the end of the on-screen page. To go to the next page you can use 'space bar' or 'f' and to go backward you can use 'b'.

To exit from the on-screen page use 'q' and you will be directed to the shell program. And for help press 'h'.

2. touch:-

Click here for reference link

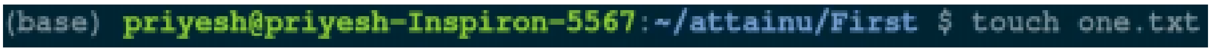
Concept

On Unix-like operating systems, the “touch” command modifies the timestamps.
If the file doesn’t exist, an empty file with that name is created.

A timestamp is information associated with a file that identifies an important time in the file’s history.

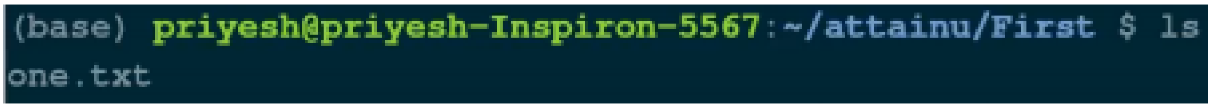
Syntax
touch <file name>

Ex:-



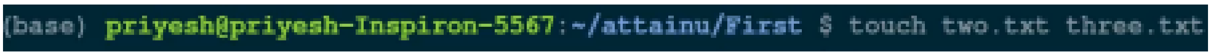
```
(base) priyesh@priyesh-Inspiron-5567:~/attainu/First $ touch one.txt
```

After entering the command type “ls” command to see if the file is created, you will get the following below screenshot.



```
(base) priyesh@priyesh-Inspiron-5567:~/attainu/First $ ls
one.txt
```

You can also create two simultaneously

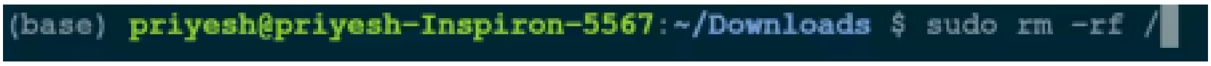


```
(base) priyesh@priyesh-Inspiron-5567:~/attainu/First $ touch two.txt three.txt
```

3. rm(remove):-

Click here for reference link

Concept
The rm command is used to remove files and directories in Linux.
Note:-do not use the command given below in the image

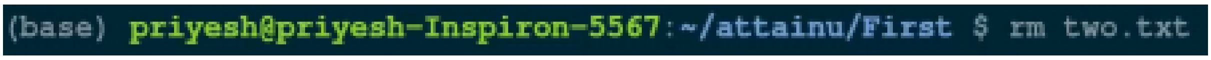


```
(base) priyesh@priyesh-Inspiron-5567:~/Downloads $ sudo rm -rf /
```

This will format your computer.

Syntax
rm <file name>

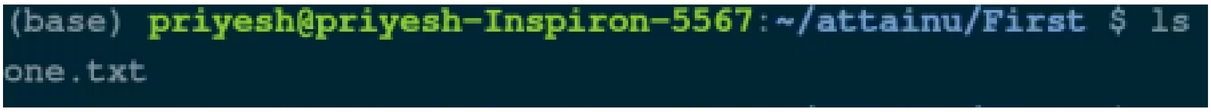
Ex:-
Let just say there were two files created namely “one.txt” and “two.txt”.



```
(base) priyesh@priyesh-Inspiron-5567:~/attainu/First $ rm two.txt
```

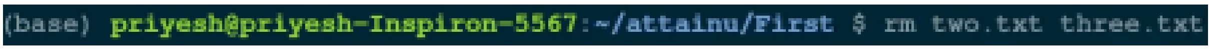
With the rm(remove) command we will remove two.txt like the above picture shows.

After entering the command type “ls” command to see if the file is removed, you will get the following below screenshot.



```
(base) priyesh@priyesh-Inspiron-5567:~/attainu/First $ ls
one.txt
```

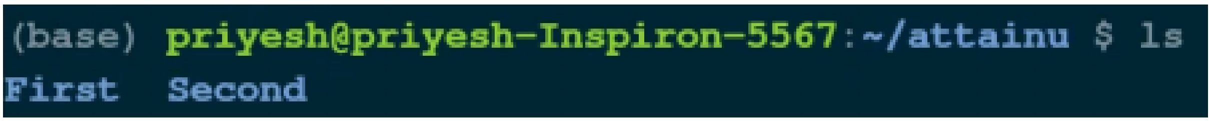
You can also remove two files simultaneously also



```
(base) priyesh@priyesh-Inspiron-5567:~/attainu/First $ rm two.txt three.txt
```

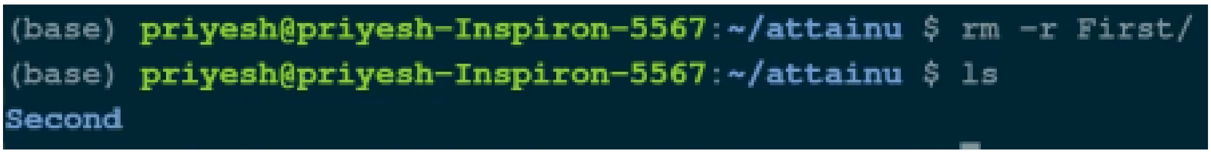
What if we want to remove the folder?

Let's say there were two folders created namely “First” and “Second”.



```
(base) priyesh@priyesh-Inspiron-5567:~/attainu $ ls
First   Second
```

Now if we want to remove the folder we’ll use “rm -r <folder name>”. Where “-r” stands for recursively.



```
(base) priyesh@priyesh-Inspiron-5567:~/attainu $ rm -r First/
(base) priyesh@priyesh-Inspiron-5567:~/attainu $ ls
Second
```

4. echo:-

Click here for reference link

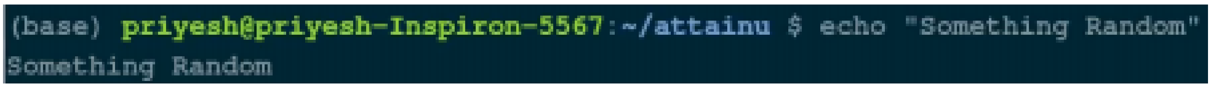
Concept

echo command in linux is used to display lines of text/string that are passed as an argument . This is a built in command that is mostly used in shell scripts and batch files to output status text to the screen or a file.

Syntax

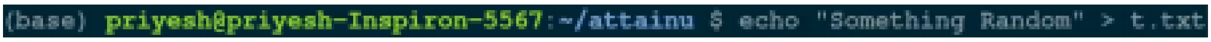
echo “any text” > <filename>

Ex:-



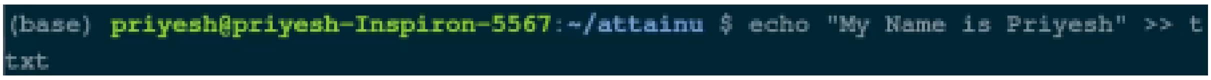
```
(base) priyesh@priyesh-Inspiron-5567:~/attainu $ echo "Something Random"
Something Random
```

echo “any text” will print text same as it is on the terminal like the above image.



```
(base) priyesh@priyesh-Inspiron-5567:~/attainu $ echo "Something Random" > t.txt
```

Echo “any text” > <filename> will write the text in the file which is given the right side of the “>”. If the file already has some text written in it, it will overwrite the text and the previous written text will permanently be removed.



```
(base) priyesh@priyesh-Inspiron-5567:~/attainu $ echo "My Name is Priyesh" >> t
txt
```

So, if we want to add some text to the existing file which is already having some text written in it, we’ll use the same command replacing “>” to “>>” and the new text will get added to the existing text. The command is shown in the above image.

So basically “>” in the command will transfer whatever is in the left side to the right side.

5. cat :-

Click here for reference link

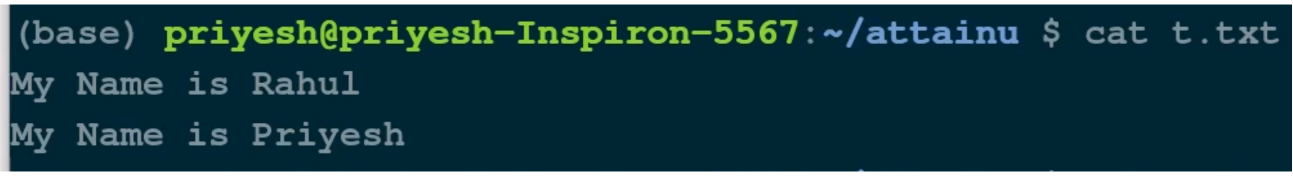
Concept

Cat command is very frequently used in Linux. It reads data from the file and gives their content as output. It helps us to create, view, concatenate files.

Syntax

cat filename

Ex:-



```
(base) priyesh@priyesh-Inspiron-5567:~/attainu $ cat t.txt
My Name is Rahul
My Name is Priyesh
```

“cat t.txt” command is showing text “My Name is Rahul, My Name is Priyesh” which is written in the file.

6. cp(copy & paste):-

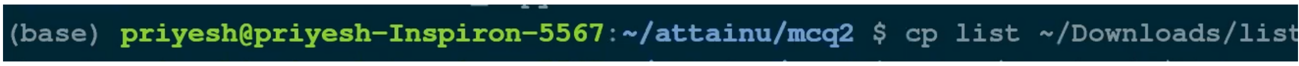
Click here for reference link

Concept

cp stands for **copy**. This command is used to copy files or groups of files or directory. It creates an exact image of a file on a disk with a different file name. *cp* command requires at least two filenames in its arguments.

Syntax
cp source_file destination_file

Ex:-



```
(base) priyesh@priyesh-Inspiron-5567:~/attainu/mcq2 $ cp list ~/Downloads/list
```

This above command will copy the contents of the “list” in “list_copy”. “list” acts as a source file whereas “list_copy” will act as a destination file.

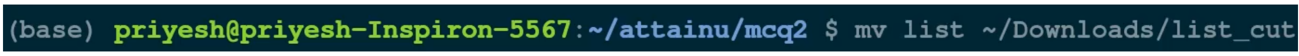
7. mv(cut & paste):-

Click here for reference link

Concept
mv stands for **move**. mv is used to move one or more files or directories from one place to another in a file system like UNIX. It has two distinct functions:
(i) It renames a file or folder.
(ii) It moves a group of files to a different directory.

Syntax
mv source_file destination_file

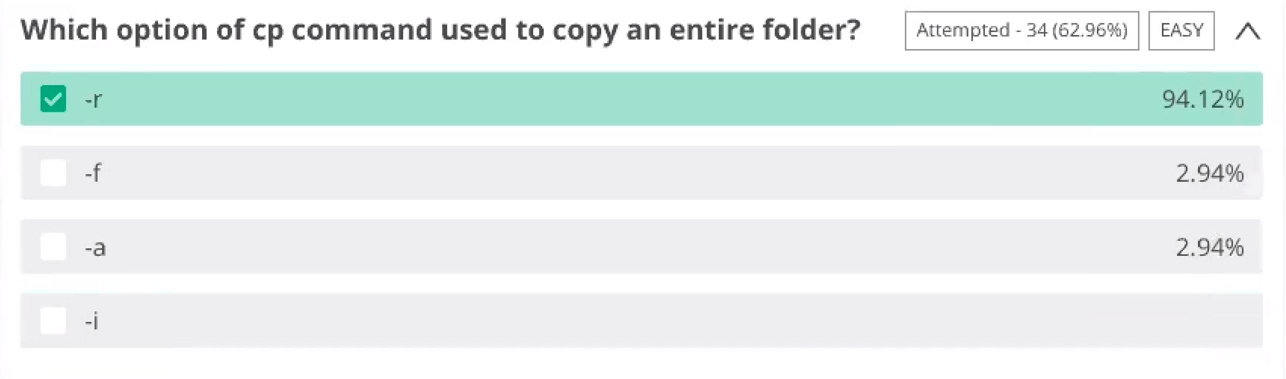
Ex:-



```
(base) priyesh@priyesh-Inspiron-5567:~/attainu/mcq2 $ mv list ~/Downloads/list_cut
```

This command moves the file “list” to the given path “~/Downloads/list.cut”. “list” act as a source file whereas “~/Downloads/list.cut” act as a destination path with filename.

MCQs:-



Which option of cp command used to copy an entire folder?

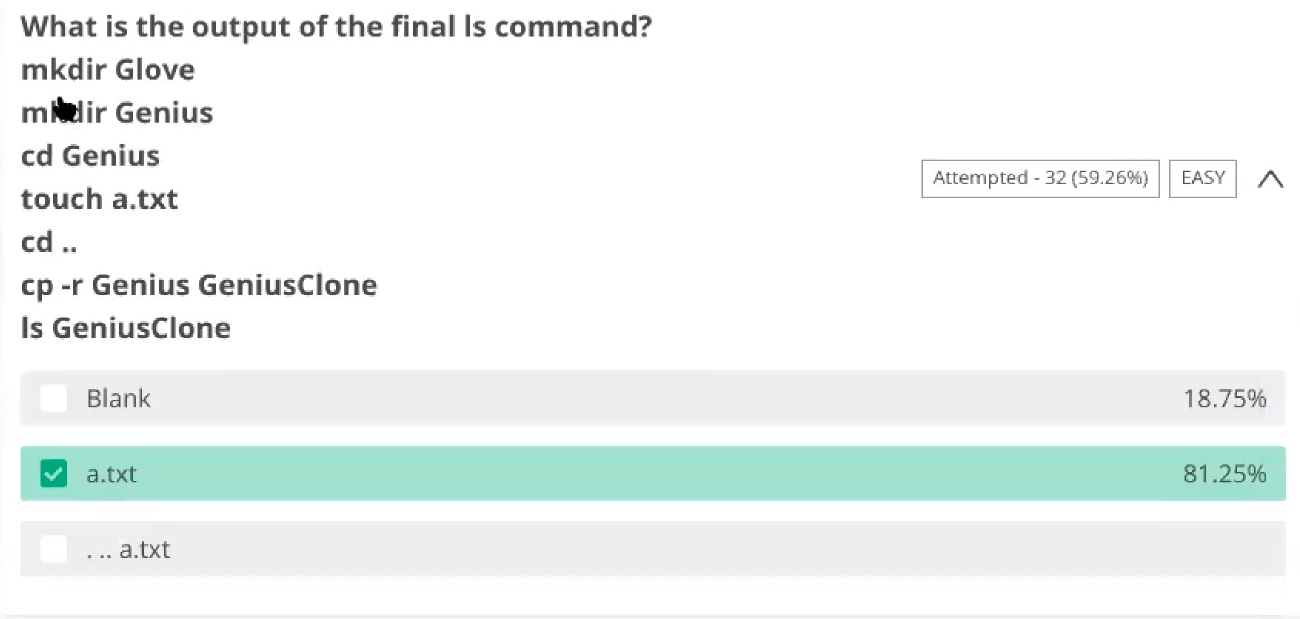
Attempted - 34 (62.96%) | EASY

☑ -r 94.12%

□ -f 2.94%

□ -a 2.94%

□ -i



What is the output of the final ls command?

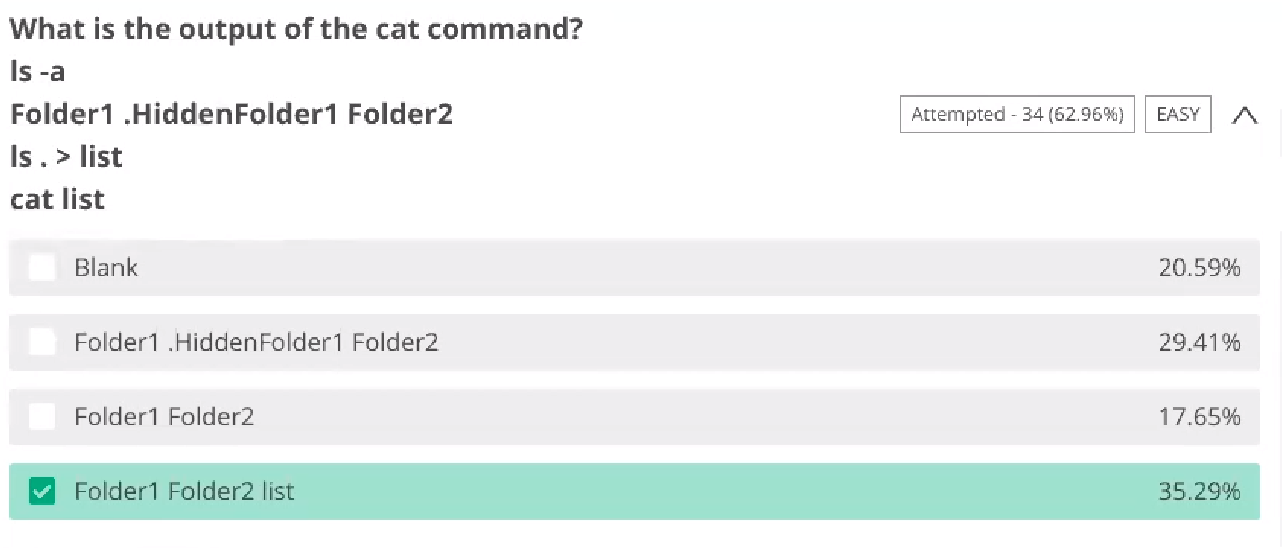
```
mkdir Glove
mkdir Genius
cd Genius
touch a.txt
cd ..
cp -r Genius GeniusClone
ls GeniusClone
```

Attempted - 32 (59.26%) | EASY

□ Blank 18.75%

☑ a.txt 81.25%

□ . .. a.txt



What is the output of the cat command?

```
ls -a
Folder1 .HiddenFolder1 Folder2
ls . > list
cat list
```

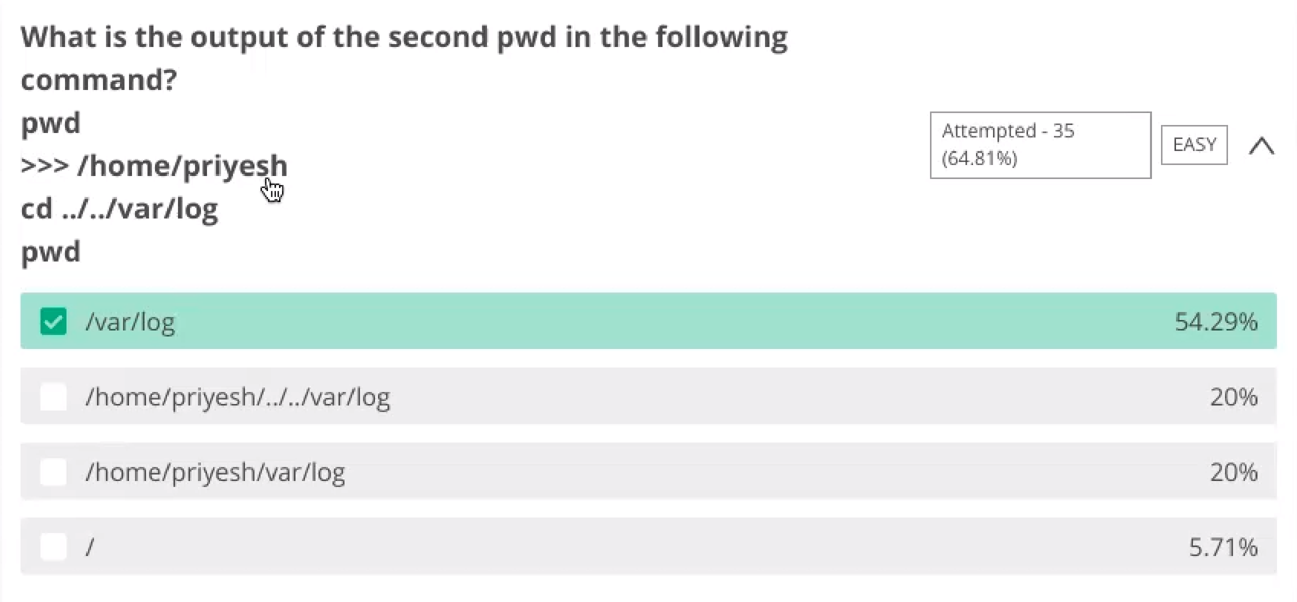
Attempted - 34 (62.96%) | EASY

□ Blank 20.59%

□ Folder1 .HiddenFolder1 Folder2 29.41%

□ Folder1 Folder2 17.65%

☑ Folder1 Folder2 list 35.29%



What is the output of the second pwd in the following command?

```
pwd
>>> /home/priyesh
cd ../../var/log
pwd
```

Attempted - 35 (64.81%)

☑ /var/log 54.29%

□ /home/priyesh/../../var/log 20%

□ /home/priyesh/var/log 20%

□ / 5.71%