

Linux Path part 2

First, find where `ls` is, and see if there are any other files named `ls`.

```
I need to list files in my home/  
To check on project logos  
But what I see with ls there,  
Are quotes from desert hobos...  
  
which piece of my command does fail?  
I surely cannot find it.  
Make straight my path and locate that-  
I'll praise your skill and sharp wit!  
  
Get a listing (ls) of your current directory.  
elf@edcede7a980d:~$ find / -name ls 2>/dev/null  
/usr/local/bin/ls  
/bin/ls  
elf@edcede7a980d:~$
```

The `find` command is handy for this. We told it to start looking at the root of the file system (`/`) and to look for files named `ls` (`-name ls`). The `2>/dev/null` says to send any error messages (`2>`) to the trash (`/dev/null`) so we don't have to look at them. When you use `find` from the root (`/`) you will get many permission errors.

```
find / -name ls 2>/dev/null
```

There are two files named `ls`. Which one is executed when you type `ls`? One way to discover that is to look at the `PATH` variable using

```
echo $PATH.
```

```
elf@edcede7a980d:~$ find / -name ls 2>/dev/null  
/usr/local/bin/ls  
/bin/ls  
elf@edcede7a980d:~$ echo $PATH  
/usr/local/bin:/usr/bin:/bin:/usr/local/games:/usr/games  
elf@edcede7a980d:~$
```

This tells us that the `ls` that executes is the one in `/usr/local/bin` because it is the first on in the `PATH`.

```
elf@edcede7a980d:~$ ls  
This isn't the ls you're looking for  
elf@edcede7a980d:~$ /usr/local/bin/ls  
This isn't the ls you're looking for  
elf@edcede7a980d:~$
```

That is not the `ls` we are looking for.

Another way to tell which `ls` executes is to use the `which` command.

```
elf@edcede7a980d:~$ which ls  
/usr/local/bin/ls  
elf@edcede7a980d:~$
```

When you execute the other `ls`, `/bin/ls`, you win the challenge.

```
elf@edcede7a980d:~$ /bin/ls
' '   rejected-elfu-logos.txt
Loading, please wait.....
```

```
You did it! Congratulations!
```

```
elf@edcede7a980d:~$
```