

Lab Report 1

1. This is what happened with each command with no arguments. Cd could not do anything because there was no directory to switch to, ls just showed the available directories, and cat froze because there was nothing to print.

- cd

```
>_ user@sahara:~  
[user@sahara ~/lecture1]$ cd  
[user@sahara ~]$
```

- ls

```
>_ user@sahara:~  
[user@sahara ~]$ ls  
lecture1  
[user@sahara ~]$
```

- cat

```
>_ user@sahara:~  
[user@sahara ~]$ cat  
█
```

2. This is what happened with arguments to a directory. Cd allowed me to go to a new directory, Ls showed me the files in the directory I switched to, and cat cannot print a directory.

- Cd

```
>_ user@sahara:~/lect...  
[user@sahara ~]$ cd lecture1/  
[user@sahara ~/lecture1]$
```

- Ls

```
>_ user@sahara:~/lect...  
[user@sahara ~/lecture1]$ ls messages/  
en-us.txt es-mx.txt ja.txt zh-cn.txt  
[user@sahara ~/lecture1]$
```

- cat

```
>_ user@sahara:~/lect...  
[user@sahara ~/lecture1]$ cat messages/  
cat: messages/: Is a directory  
[user@sahara ~/lecture1]$
```

3. This is what happened with arguments to a file. Cd could not switch to a file, ls printed out the name of the file, and cat printed out what was inside the file to the console.

- Cd

```
>_ user@sahara:~/lect...  
[user@sahara ~/lecture1]$ cd Hello.java  
bash: cd: Hello.java: Not a directory  
[user@sahara ~/lecture1]$ █
```

- Ls

```
>_ user@sahara:~/lect...  
[user@sahara ~/lecture1]$ ls Hello.java  
Hello.java  
[user@sahara ~/lecture1]$ █
```

- Cat

```
>_ user@sahara:~/lect...  
[user@sahara ~/lecture1]$ cat  
.git/      Hello.class  Hello.java  messages/  README  
[user@sahara ~/lecture1]$ cat Hello.java  
import java.io.IOException;  
import java.nio.charset.StandardCharsets;  
import java.nio.file.Files;  
import java.nio.file.Path;  
  
public class Hello {  
    public static void main(String[] args) throws IOException {  
        String content = Files.readString(Path.of(args[0]), StandardCharsets.UTF_8);  
        System.out.println(content);  
    }  
}[user@sahara ~/lecture1]$ █
```