

Final Project

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SHELL

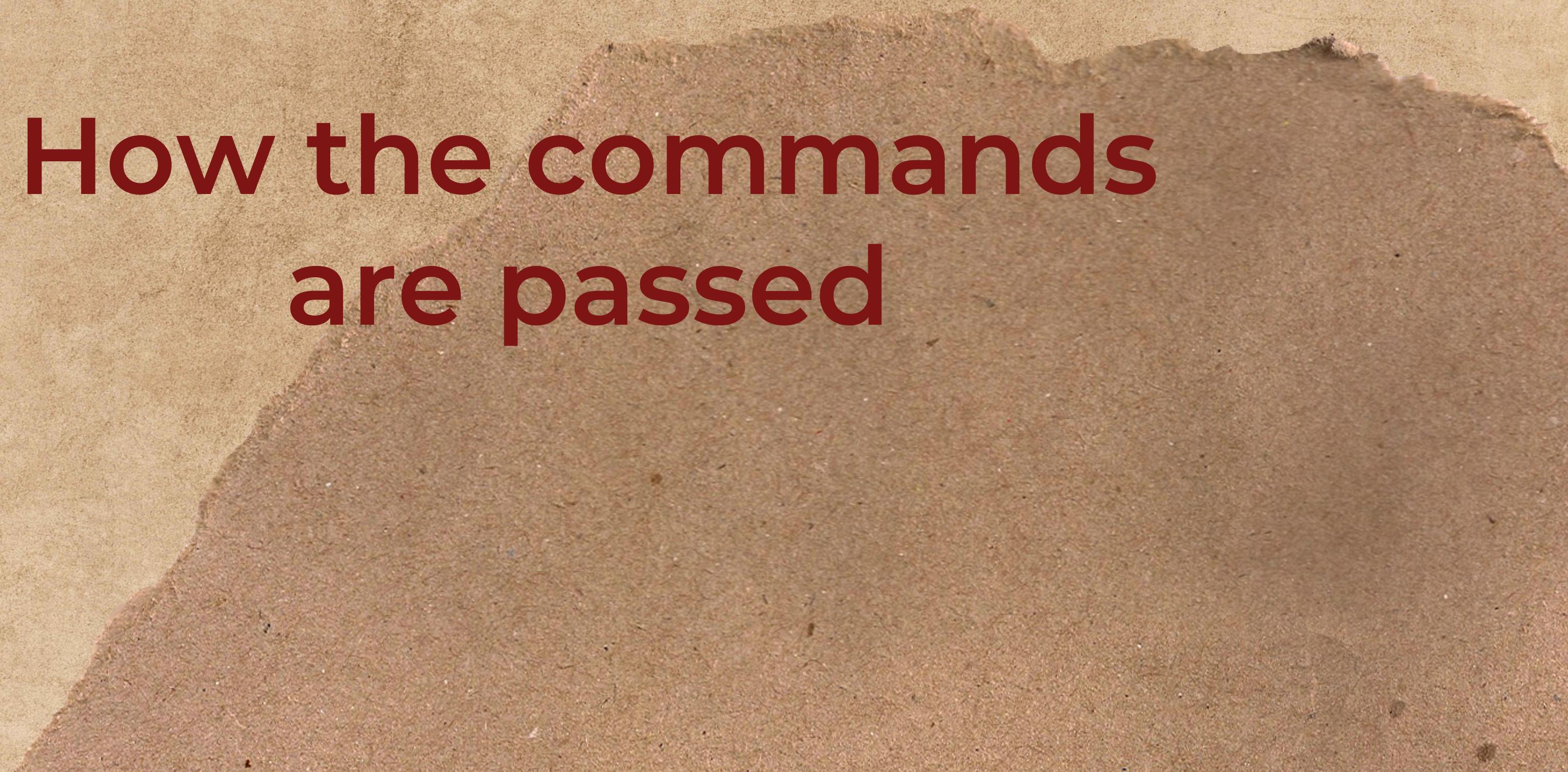
A shell refers to a user interface that allows interaction with the operating system's kernel and other system services. It is a command-line interpreter or a graphical interface through which users can execute various commands and manage the computer's resources.

My Implementation

Here, I have implemented a shell script that apart from running regular shell commands such as `ls` and `quit`, can also run pipelining commands and certain Bash Built-in Commands such as `cd`, `echo`, `alias`, and `pwd`.

Basic Commands

- **ls**
- **mkdir**
- **rmdir**
- **ls -1**



How the commands
are passed

Pipelining Commands

- `ls -l | wc -l`
- `ls -laF | tail`
- `ls -al | more`

How It Works

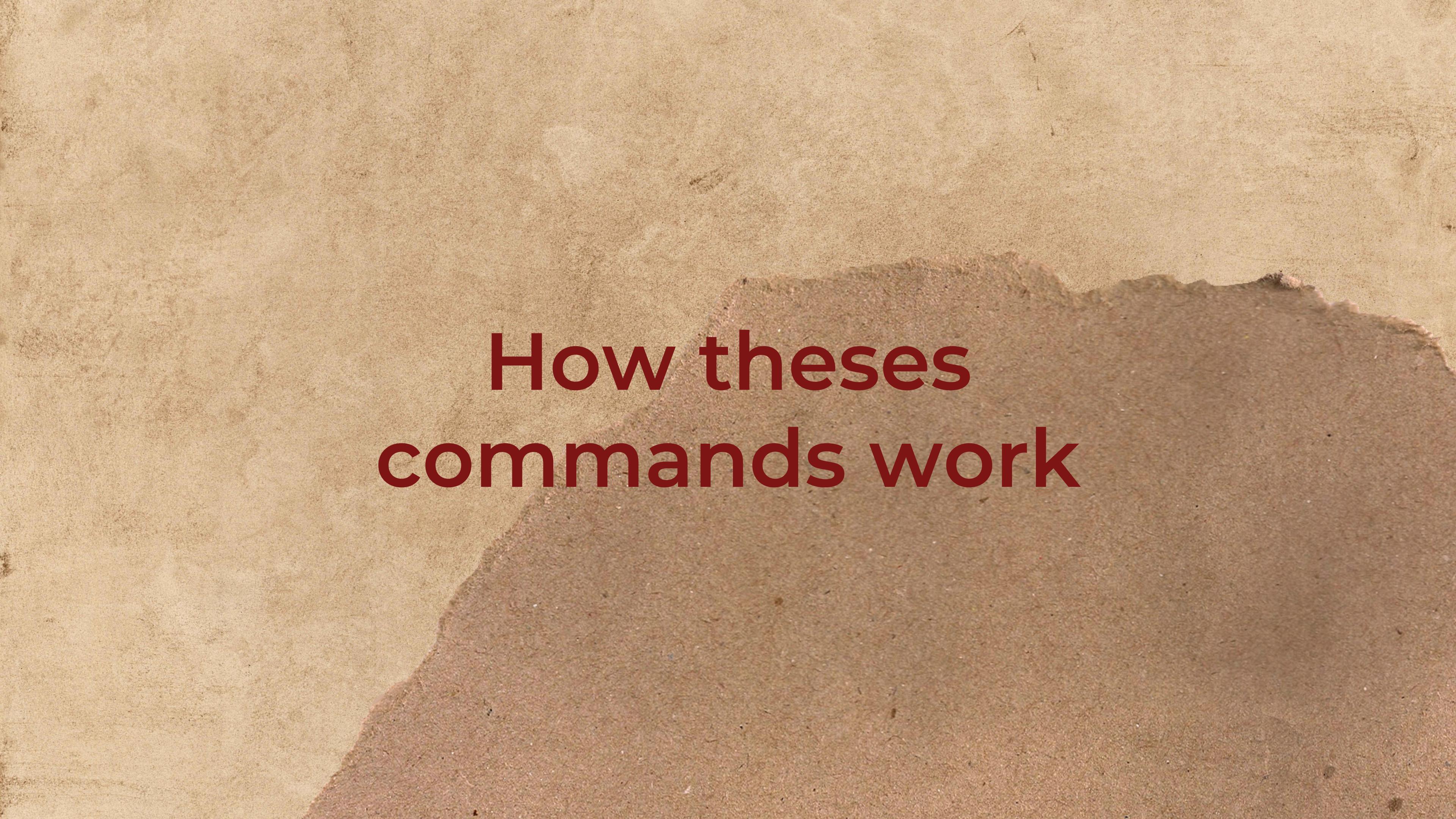
To implement pipelining commands, the code simply creates a pipe that a command can write to, and the next command can read from as an input for itself.

```
if (i != commands.size() - 1) {  
    pipe(fd);  
}
```

The above line of code creates a pipe for the commands to use to exchange outputs.

Bash Built-in Commands

- echo
- pwd
- cd
- alias



How theses
commands work

`std::endl`