

# 1 Navigation

## 1.1 File System

### 1.2 ls

- looks at the directory you are in
- lists all the files and directories inside of it

### 1.3 pwd

- stands for “print working directory.”
- prints the path of directory you are currently in
- Together `ls`, the `pwd` are useful to show where you are in the filesystem.

### 1.4 cd

- stands for “change directory.”
- switches you into the directory you specify.

#### Example

```
cd 2015
```

– 2015 is called argument

- `..` is used to move up directory

#### Example

```
cd ..
```

### 1.5 mkdir

- stands for “make directory”
- takes in a directory name as an argument and then creates a new directory in the current working directory.

### 1.6 touch

- creates a new file inside the working directory.
- takes in a filename as an argument and then creates an empty file with that name in the current working directory.

## 1.7 Helper Commands

- `clear` - clears terminal
- `tab` - autocomplete your command
- up down arrows - cycle through previous commands
  - down arrow - most recent command

## 1.8 Review

- the command `line` is the interface for computer's operating system
- A `filesystem` organizes a computer's files and directories into a tree structure
- Navigating through directory
  - `pwd` outputs the name of the current working directory.
  - `ls` lists all files and directories in the working directory.
  - `cd` switches you into the directory you specify.
  - `mkdir` creates a new directory in the working directory.
  - `touch` creates a new file inside the working directory.

## 1.9 Quiz

- What does the following command do?
  - a) It creates a file named `popular.txt` in the `media` directory.
  - b) It creates a file named `popular.txt` in your working directory.
  - c) It changes the working directory to the `media` directory.
  - d) This command is not formed correctly.

**Answer:** A

- If the current working directory is `home/`, which of the following commands will navigate to the `movies/` directory in the tree below?
  - a) `cd movies`
  - b) `mkdir media/movies`
  - c) `ls media/movies`
  - d) `cd media/movies`

**Answer:** D

- How do you print the current working directory?

- a) mkdir
- b) pwd
- c) cd
- d) ls

**Answer: B**

- How would you change to one directory above the current working directory?

- a) cd ..
- b) cd ../..
- c) ls ..
- d) mkdir ..

**Answer: A**

- What is a filesystem?

- a) It organizes a computer's files and directories into a tree structure.
- b) It's a type of directory.
- c) It's a text interface with a computer.
- d) It is a directive to the computer to perform a specific task.

**Answer: A**

- What is a directory?

- a) A file
- b) A command to a computer
- c) A tree structure
- d) A folder used to store files

**Answer: D**

- How would you create a file named text.txt in your current directory?

- a) ls text.txt
- b) mkdir text.txt
- c) touch text.txt
- d) touch home/text.txt

**Answer: C**

## 2 Project: Bicycle world

### 2.1 Task Solution

1. `pwd`
2. `ls`
3. `cd freight/`
4. `ls`
5. `cd porteur/`
6. `pwd ../.. ls`
7. `cd mountain/downhill`
8. `touch dirt.txt`
9. `touch mud.txt`
10. `ls`
11. `mkdir safety`
12. `cd ../../`
13. `ls`
14. `mkdir bmx`
15. `touch bmx/tricks.txt`
16. `ls`

### 2.2 Project: Daily Buzz

- `pwd`
- `ls`
- `cd national/politics`
- `ls`
- `mkdir elections`
- `cd elections`
- `touch candidates.txt issues.txt`

- `cd ../../../../, pwd`
- `mkdir business, cd business`
- `ls`
- `mkdir startups, cd startups`
- `cd ../, mkdir startups/disruptors`
- `touch startups/disruptors/tech.txt`  
    `startups/disruptors/design.txt`  
    `startups/disruptors/education.txt`
- `ls, pwd`