

Downloading Code from Github at the command line

```
git clone <repository-url>
```

Downloads (“clones”) the code from the given repository-url. The repository with the example from this lecture is at

<https://github.com/ucsd-cse15l-f23/lecture1>



Example file structure:

```
/home/
|- lecture1/
   |- Hello.java
   |- README
   |- messages/
      |- en-us.txt (English, USA)
      |- es-mx.txt (Espanol, Mexico)
      |- zh-cn.txt (Chinese, PRC)
```

Absolute path: Where a single file or folder is within a filesystem Example: `/home/lecture1/README`
Root folder/directory: The folder that isn't contained in any other folder. Often written as `/` or `C:\\`
Relative path: A part of a path that doesn't start with the root. Example: `lecture1/README`
Working directory: An absolute path to a directory that a program or terminal uses to resolve relative paths.
Parent directory: The directory “above” or “outside” the current directory. In paths, written `..`
No directory/no path: Single dots `.` in absolute paths are ignored (e.g. `/home/./lecture1` means `/home/lecture1`)

Some Key Commands

```
cat <path1> <path2> ... - "Concatenate" Used to print the contents of one or more files given by the paths
ls <path> - "List" Used to list the files and folders the given path
pwd - "Print working directory" Used to display the current working directory
cd <path> - "Change Directory" Used to switch the current working directory to the given path
```

Consider the following working directories, relative paths, and corresponding absolute paths. Fill in the blanks.

To resolve a relative path, join it with the current working directory, then remove single dots and collapse directory names that are followed by `..`.

Working Directory (pwd)	Relative Path	Absolute Path
/home	./lecture1	/home/lecture1
/home/lecture1/messages	../Hello.java	/home/lecture1/Hello.java
/home/lecture1	/messages/en-us.txt	/home/lecture1/messages/en-us.txt
/	home	/home
/home/lecture1	..	/home
/home/lecture1	Goodbye.java	/home/lecture1
/home/	messages/	/home/lecture1/messages

Starting from the working directory `/home/lecture1/messages/`, what absolute path or file do each of these refer to?

- `/home/lecture1/Hello.java`
- `../Hello.java`
- `../lecture1/Hello.java`
- `/home/lecture1/messages/../Hello.java`
- `./Hello.java`
- `home/lecture1/Hello.java`
- `../../Hello.java`
- `~/lecture1/messages/Hello.java`
- `~/lecture1/Hello.java`
- `~/../joe/lecture1/Hello.java`

Starting from the web page `https://website.org/lab-reports/index.html`, what full URL do each of these link paths refer to?

- `/images/picture.png`
- `../images/picture.png`
- `./picture.png`
- `images/picture.png`
- `https://website.org/lab-reports/picture.png`
- `https://website.org/images/picture.png`
- `./images/picture.png`
- `/`
- `../`

A developer is working on a Github Pages site. They are adding an image to their `index.md` file. The image looks great in their Visual Studio Code preview, but on their Github Pages site it appears as a broken image link. Here's their VSCode and their Github repository:

main

Go to file

Add file

<> Code

SurfCoder Add some text to index.md ... 2 days ago 586

index.md Update 1 day ago

EXPLORER

OPEN EDITORS

TEST-PAGE

index.md

profile-pic.png

index.md

index.md > # My Awesome Page

1 # My Awesome Page

2

3 I look like this: ![Profile Picture!]

(./profile-pic.jpg)

What's going on? What mistake or mistakes might they have made?