Managing directories from the command line

path - full name of a file or directory, e.g. /home/alinen/cs21, a unique location

Special directories:

.. ← the parent directory (two dots)
.
   ← the current directory (one dot)
/
   ← the root directory
/home/<username> ← your home directory

~ ← your home directory
Exercise - UNIX commands

When was your home directory created? (ls -l /home)

Create a directory structure like the one on the right

Rename B to B1 (mv B B1)

Copy B1 to B2 (cp -r B1 B2)

Remove a directory (careful with this!!) (rm -r B1)

Try: ssh <username>@lab.cs.swarthmore.edu
Exercise - UNIX commands

Answers are in **bold**. Supporting commands are in regular font.

```bash
oil[~]$ mkdir A
oil[~]$ cd A
oil[A]$ pwd
/home/alinen/A
oil[A]$ mkdir B
oil[A]$ cd B
oil[B]$ pwd
/home/alinen/A/B
oil[B]$ cd ..
oil[A]$ ls
B/

oil[A]$ mv B B1
oil[A]$ cp -r B1 B2
oil[A]$ rm -r B1
rm: remove directory 'B1'? y
```
Exercise - UNIX commands (challenge)

When was your home directory created? (ls -l /home)

Create a directory structure like the one on the right (mkdir)

Rename D to C1 (mv)

Copy E to B (cp)

Remove all the directories you created (careful with this: rm -r <dir> A)

Try: ssh <username>@lab.cs.swarthmore.edu
**Exercise - UNIX commands**

This problem was challenging so don’t worry if you found it confusing. Answers are in **bold**. Supporting commands are in regular font.

```sh
ioil[~]$ pwd
/home/alinen
oil[~]$ mkdir A
oil[~]$ cd A
oil[A]$ pwd
/home/alinen/A
oil[A]$ mkdir B
oil[A]$ mkdir C
oil[A]$ ls
B/ C/
oil[A]$ tree -d /home/alinen/A
/home/alinen/A
├── B
└── C

oil[A]$ cd C
oil[C]$ ls
D/ E/
oil[C]$ tree -d /home/alinen/A
/home/alinen/A
├── B
│   └── C
└── D
    └── E

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oil[A]$ mkdir D
oil[C]$ mkdir E
oil[C]$ ls
D/ E/
oil[C]$ tree -d /home/alinen/A
/home/alinen/A
├── B
│   └── E
├── C
└── D
    └── E

5 directories

oil[A]$ mv D C1
oil[C]$ ls
C1/ E/

oil[C]$ cp -r E /home/alinen/A/B
```

/home/alinen/A
├── B
│   └── E
└── C
    └── C1
        └── E

5 directories