

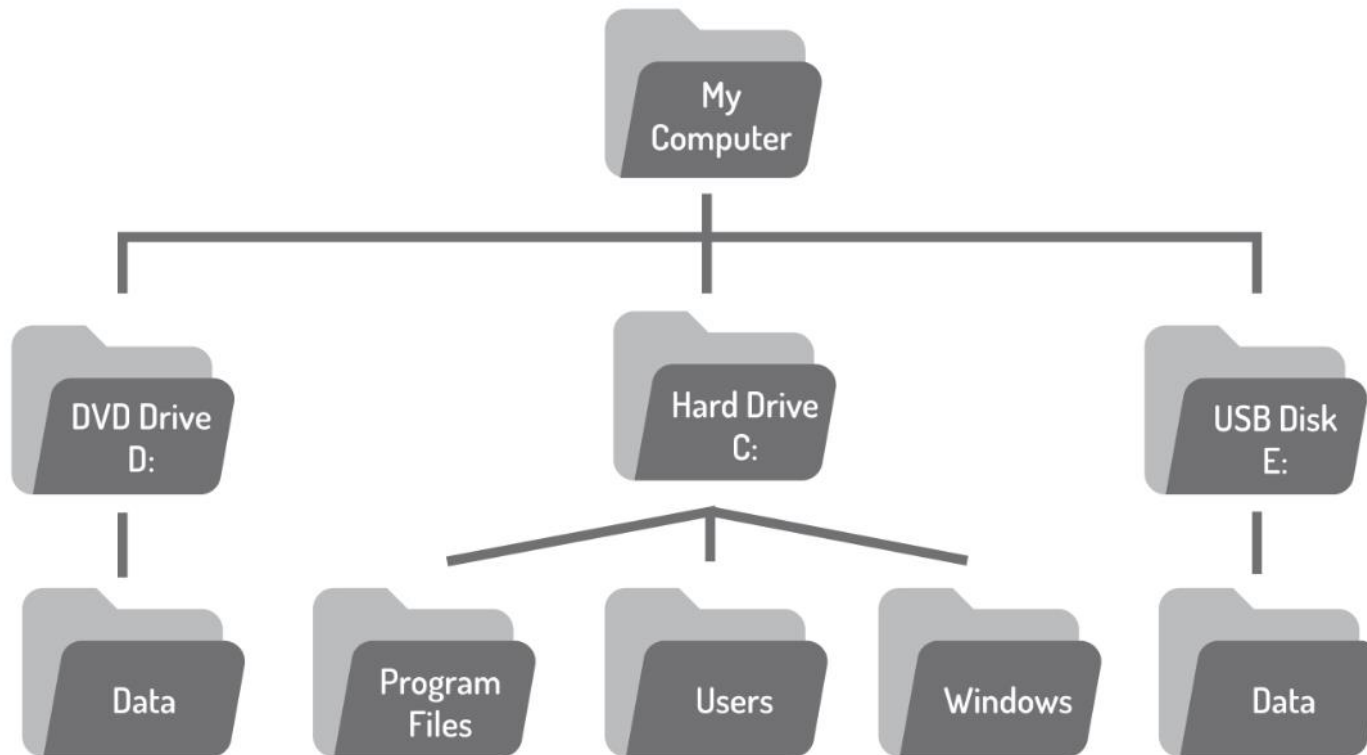
Linux Essentials

NAVIGATION

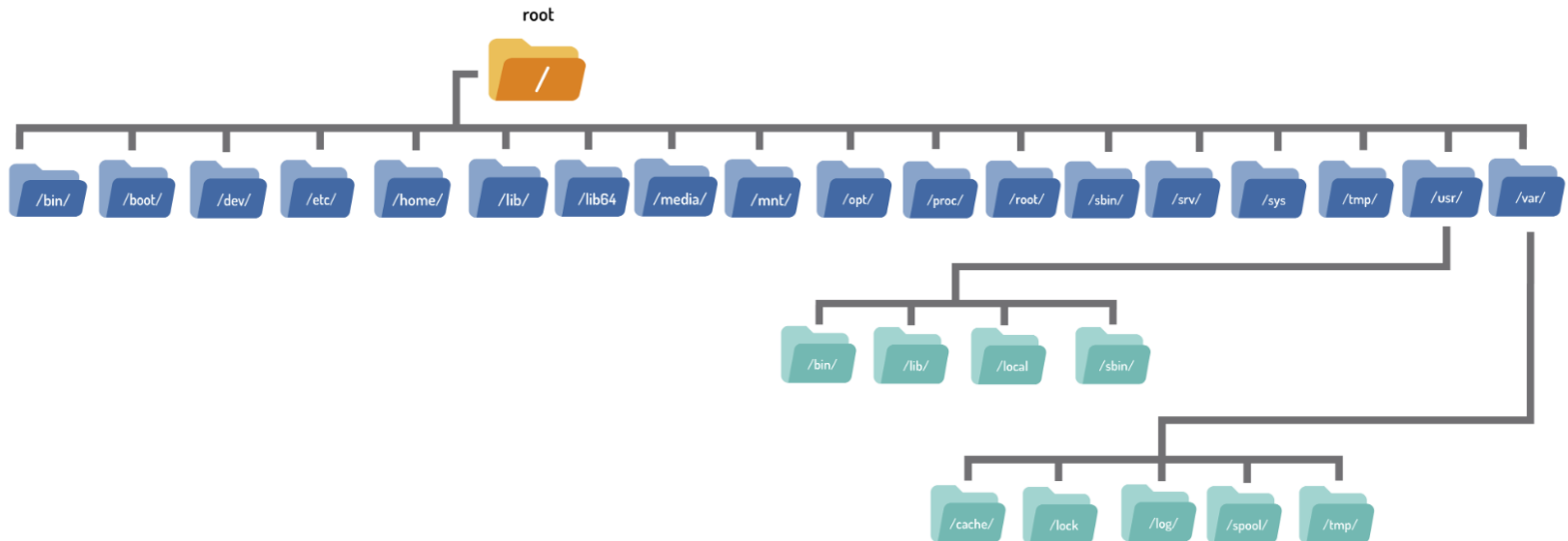
Introduction

- In Linux, everything is considered a **file**.
 - **Files** are used to store data such as text, graphics, and programs.
 - **Directories** are a type of file used to store other files; Windows and Mac OS X users typically refer to them as *folders*.
 - In any case, directories are used to provide a **hierarchical** organization structure. However, this structure may be somewhat different depending on the type of system in use.
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- ✓ When working in a Linux operating system, it is important to know how to manipulate files and directories.
 - ✓ Some Linux distributions have GUI-based applications that allow you to manage files, but it is advantageous to know how to perform these operations via the command line.

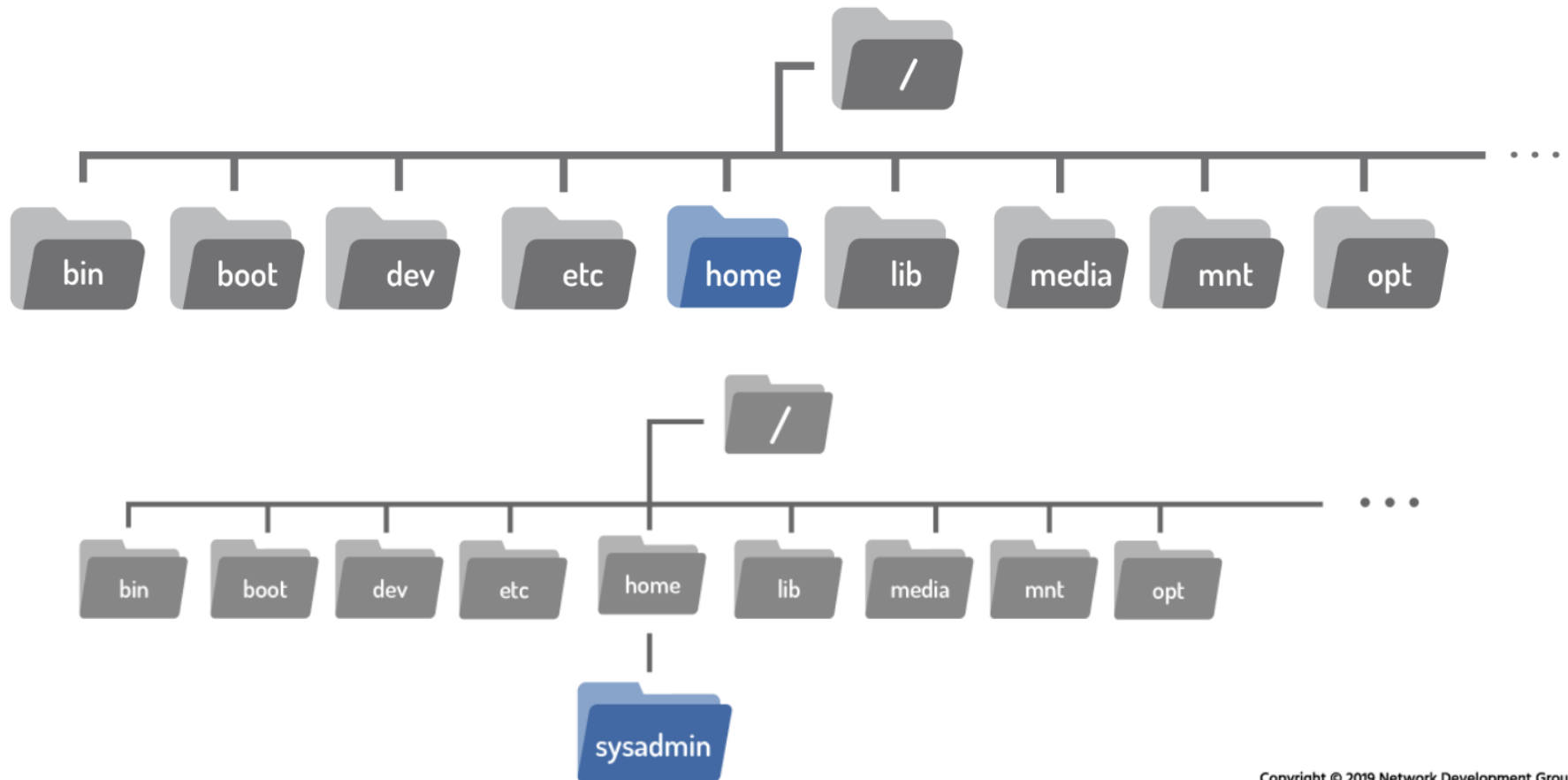
Directory Structure



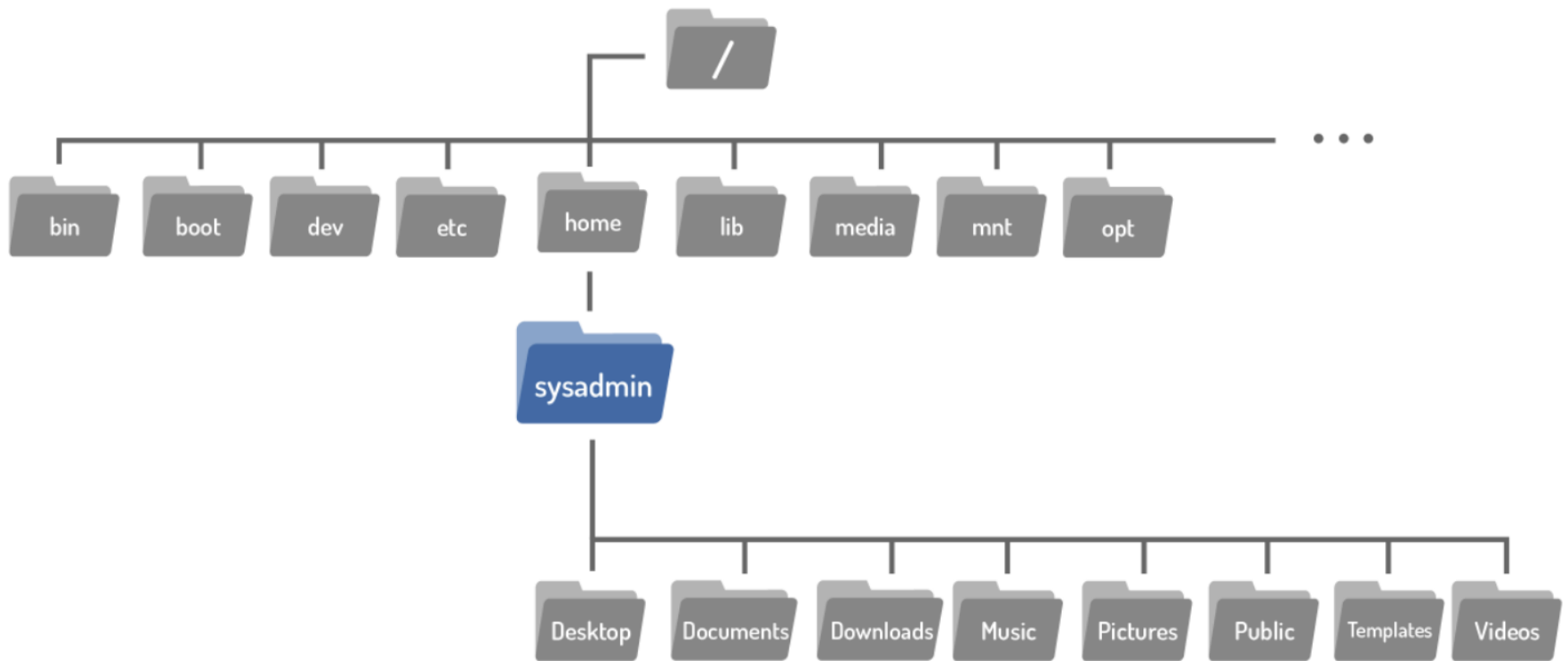
Directory Structure



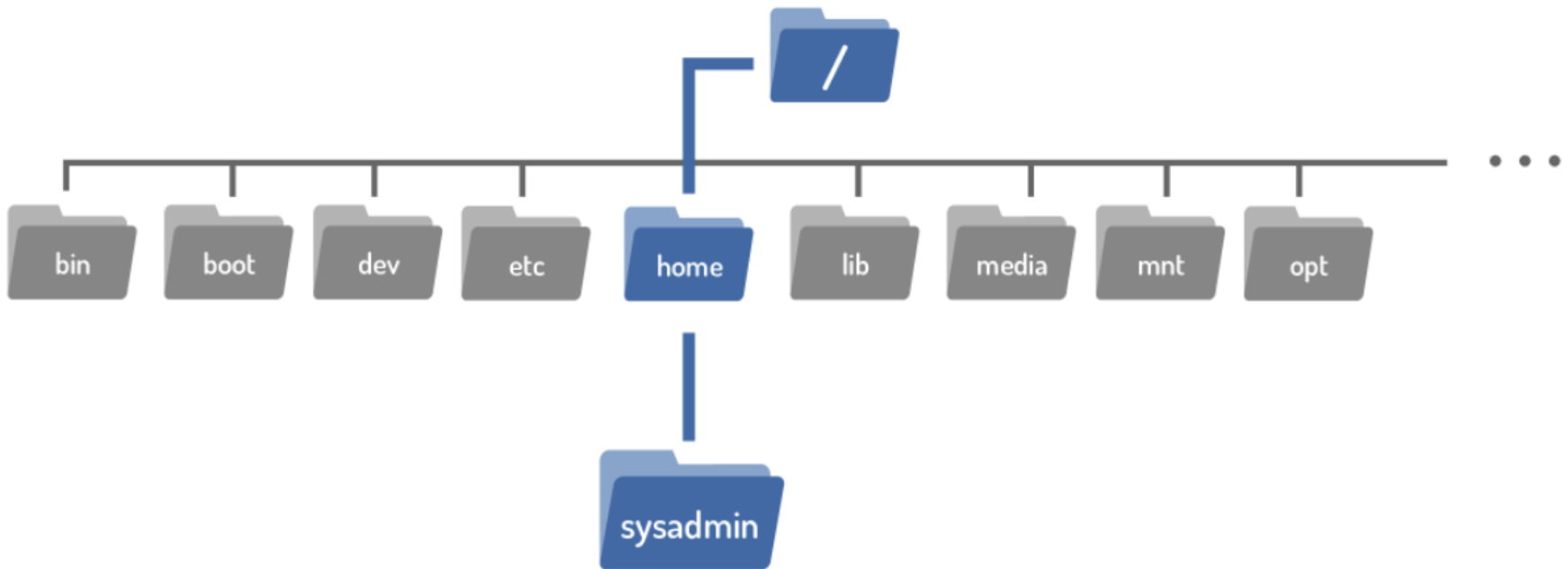
Home Directory



Home Directory

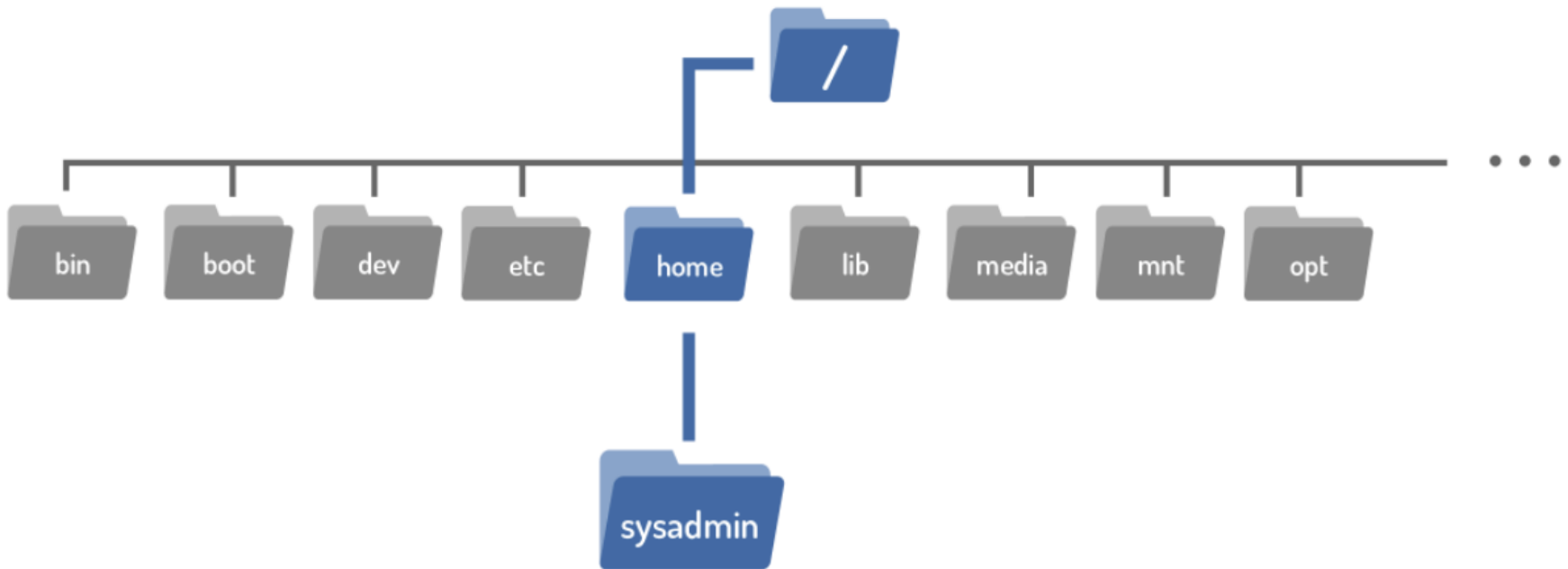


Paths



Path: `/home/sysadmin`

Paths



Path: `/home/sysadmin`

Absolute Paths

```
sysadmin@localhost:~/Documents$ cd /home/sysadmin
```

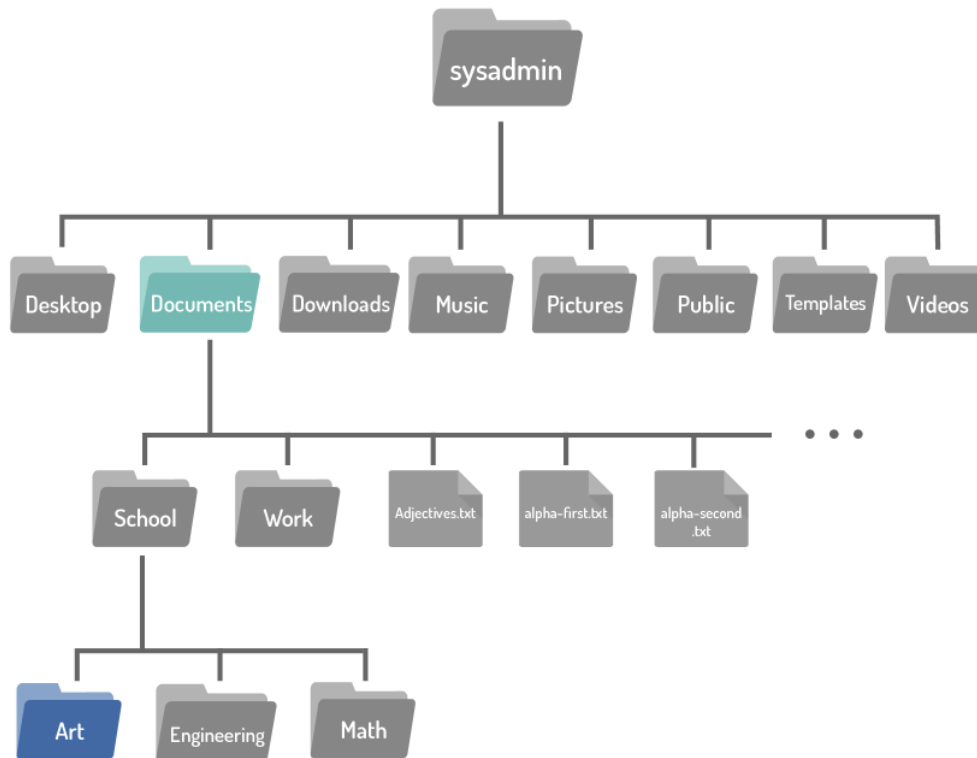
```
sysadmin@localhost:~$ pwd  
/home/sysadmin
```

Relative Paths

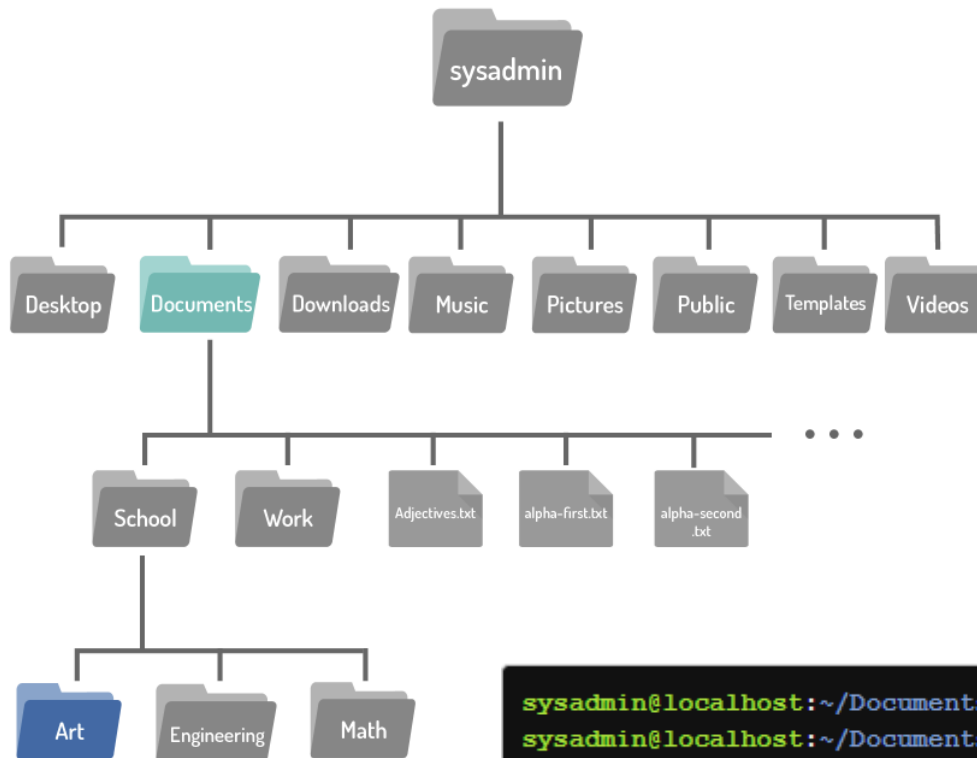
- ❑ *Relative paths* start from the current directory.
- ❑ A relative path gives directions to a file relative to the current location in the filesystem

```
sysadmin@localhost:~$ cd Documents  
sysadmin@localhost:~/Documents$
```

Example:

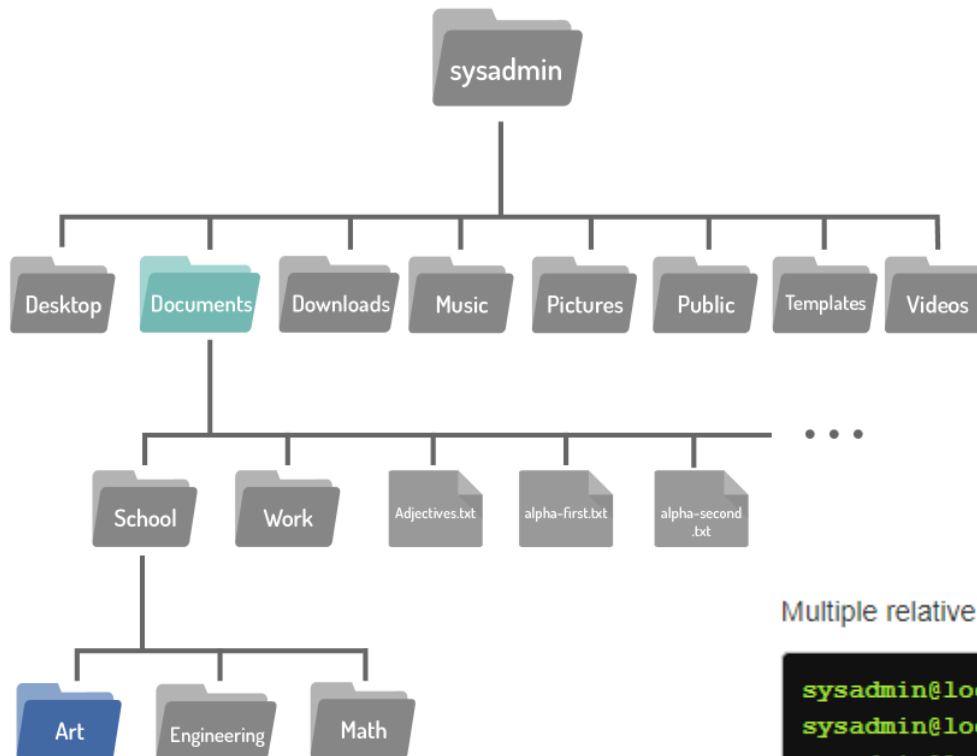


Example: Absolute Path



```
sysadmin@localhost:~/Documents$ cd /home/sysadmin/Documents/School/Art
sysadmin@localhost:~/Documents/School/Art$
```

Example: Relative Path



Multiple relative paths can be used:

```
sysadmin@localhost:~/Documents$ cd School
sysadmin@localhost:~/Documents/School$ cd Art
sysadmin@localhost:~/Documents/School/Art$
```

Recursive Listing

ls -R

```
sysadmin@localhost:~$ ls -R /etc/ppp
/etc/ppp:
ip-down.d  ip-up.d

/etc/ppp/ip-down.d:
bind9

/etc/ppp/ip-up.d:
bind9
```

Sort Listing

ls -lS

ls -lt

ls -lh

ls -rS

ls -rtl

ls -rlh