

# Programming fundamentals with Python

## Command Line Interface

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# Plan for today

- Learn a bit about CLI tools

# Plan for today

- Learn a bit about CLI tools
- Learn about version control systems



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# Installing Git

If you don't have it installed, you can get it from  
**<https://git-scm.com/downloads>**



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# Command line

The command line allows users to navigate the computer and manage it. We can do almost the same things with the command line and a graphical user interface.

```
Windows\system32\cmd.exe - ping 192.168.1.1 -t
from 192.168.1.1: bytes=32 time=1ms TTL=100
from 192.168.1.1: bytes=32 time=1ms TTL=100
from 192.168.1.1: bytes=32 time=167ms TTL=100
from 192.168.1.1: bytes=32 time=2ms TTL=100
from 192.168.1.1: bytes=32 time=2ms TTL=100
from 192.168.1.1: bytes=32 time=1ms TTL=100
Request timed out.
from 192.168.1.1: bytes=32 - MISCOMPARE at offset 1 - time=2ms
Request timed out.
from 192.168.1.1: bytes=32 time=4ms TTL=100
from 192.168.1.1: bytes=32 time=5ms TTL=100
from 192.168.1.1: bytes=32 time=387ms TTL=100
from 192.168.1.1: bytes=32 time=2ms TTL=100
from 192.168.1.1: bytes=32 time=2ms TTL=100
from 192.168.1.1: bytes=32 time=1ms TTL=100
from 192.168.1.1: bytes=32 time=1ms TTL=100
from 192.168.1.1: bytes=32 time=1ms TTL=100
from 192.168.1.1: bytes=32 time=108ms TTL=100
Request timed out.
```

## Disclaimer

In this slide set, every time you see a \$ at the beginning of the line it means that that's a command to be written in the terminal.



## Disclaimer

In this slide set, every time you see a **\$** at the beginning of the line it means that that's a command to be written in the terminal.

## Disclaimer 2

If you're on Mac, we will use the **Terminal** for today's session, if you're on Windows, please open **Git Bash**.

# Listing files

We can **list files** in a folder using the **ls** command.

```
$ ls
```

```
Desktop  Documents Downloads Library  Movies      Music      Pi
```



# Changing directories

We change directories (move around) using **cd**.

```
$ ls
```

```
Desktop    Documents Downloads Library    Movies    Music    Pi
```

```
$ cd Desktop
```

# Changing directories

We can go to *upper* directories using **cd ..**

```
$ ls
```

```
Desktop  Documents Downloads Library  Movies  Music  Pi
```

```
$ cd Desktop
```

```
$ cd ..
```

```
$ ls
```

```
Desktop  Documents Downloads Library  Movies  Music  Pi
```

# Getting current directory

We can see where we are with the **pwd** command

```
$ pwd  
/Users/pepe
```

```
$ cd Desktop
```

```
$ pwd  
/Users/pepe/Desktop
```

**pwd** stands for print working directory

# Creating directories

One can create directories using the `mkdir` command:

```
$ pwd
```

```
/Users/pepe
```

```
$ mkdir hello_dolly
```

```
$ cd hello_dolly
```

```
$ pwd
```

```
/Users/pepe/hello_dolly
```

