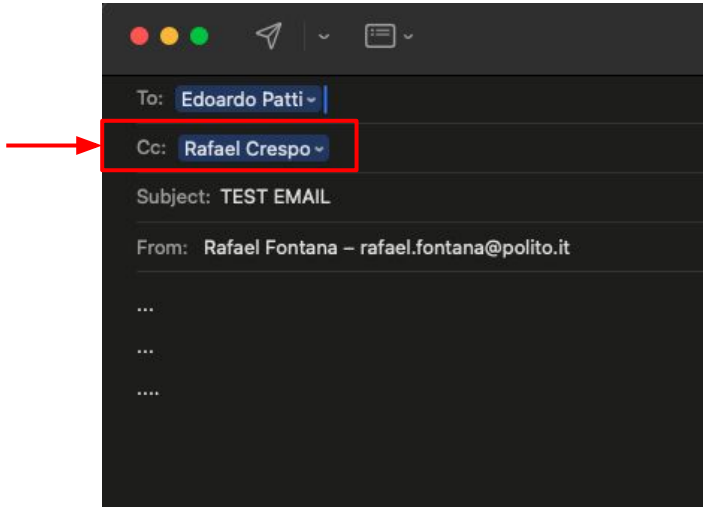
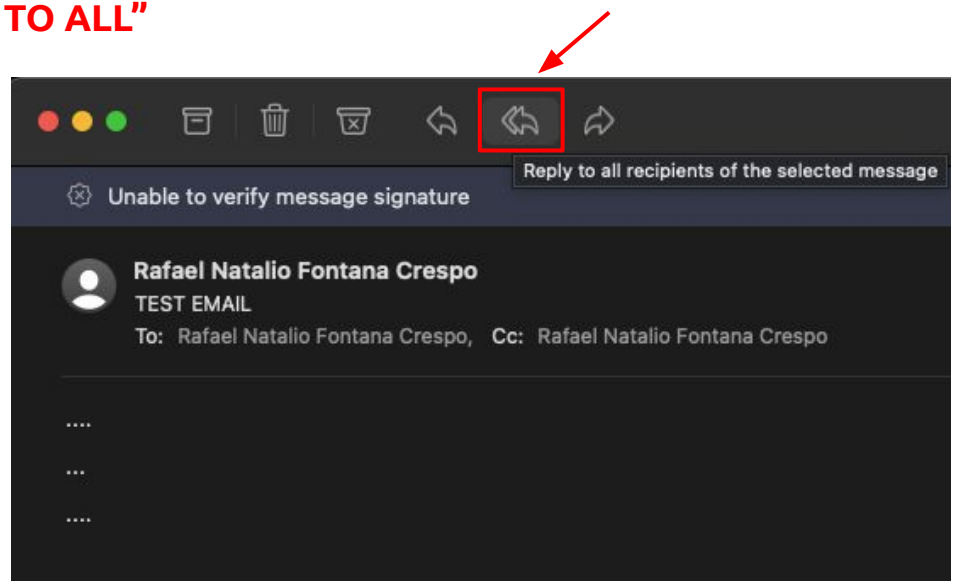
Get Ready for Developing in Python

How to write an email?

- Please when communicating regarding matters of the course, always put the other Professor in **CC** !!
- When answering, be sure of using **“REPLY TO ALL”**





In these slides we will see:

- How to install Python 3.X interpreter
- How to install an IDE (VSCode) to write our code
- How to use a version control tool (Git)

Install Python on Windows

- Download the latest Python release installer for your OS from here
- Launch the Installer
- Pay Attention to select *"add Python to path"*
- Wait until it's done

Install Python on MacOS

You've two alternatives:

1. Proceed as indicated with Windows (obviously download the installer for MacOS)
2. If you have brew installed just open a terminal and write *brew install python3*

Install Python on Linux

Python3 should be already available on most Linux distributions.

In case you don’t have it you can install it by writing on a terminal:

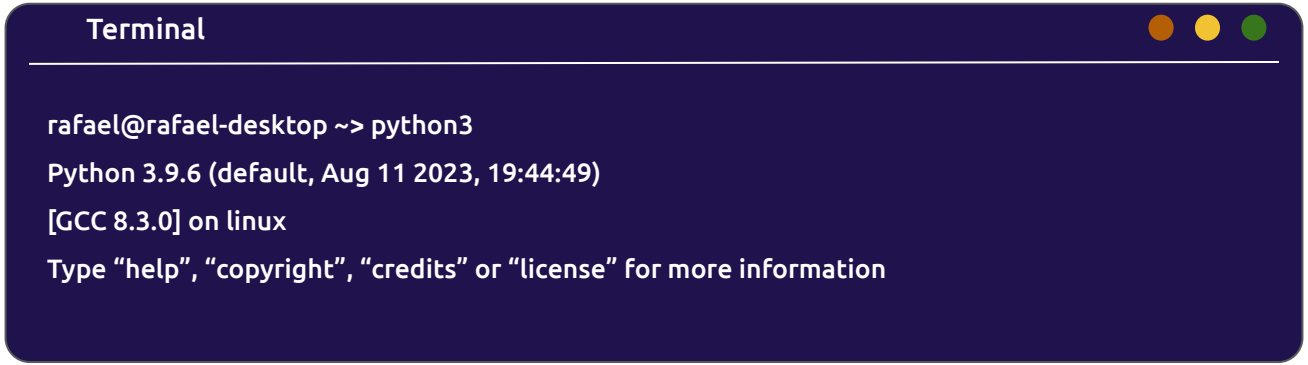
```
Terminal

sudo “name of the packet manager” install python3
```

- *For example in Ubuntu sudo apt-get install python3*

Ready Check

To check whether Python has been correctly installed open a terminal and type *python3*. You should see something like this:



How to install an IDE?

I suggest you to use VSCode. You may already be familiar with other IDE's such as PyCharm or Spyder but, unless you're a master at using them, please avoid them (specially Spyder).

Go on the VSCode website and follow the installation guide for your OS. 

I will mainly use VSCode during the lessons, but you can use others if you're familiar with them (in that case, I may not be able to solve all the IDE related issues 😅)

Optional for VSCode

In the *Extensions* tab (on the left side) search for *python* and install the extension

What is Git?

Don’t confuse Git with GitHub

- Git is a version control tool
- GitHub provides cloud services using Git (remote repositories, bug tracking, wiki page, etc)

Git is NOT like Dropbox or Google Drive

- True version control, not just file history
- Need to resort to console sooner or later

How to install Git?

To simplify the work, we will use GitKraken. This will install both Git and a GUI to interact with our repositories (the place where the code is stored).

Just follow the link and install the version according to your OS.

Register to a Git cloud service

Before starting to save our code, we need to register to a Git cloud service. In the following slides we will work with GitLab (you can register here). With the free trial we will be able to accomplish all we need for this course (remember to confirm the email or nothing will work!). If you already have an account on other Git services (i.e. GitHub, Bitbucket) you can use it

Start a new repository on GitLab

To create a new repository on GitLab, open GitKraken and select *"Start a hosted repo on GitLab"*.

Connect to your GitLab account by following the procedure.

Fill in the details according to:

- Your account name
- The name you choose for the repo
- Where you want to store the code on your pc

Then select *"Create repository and clone"*

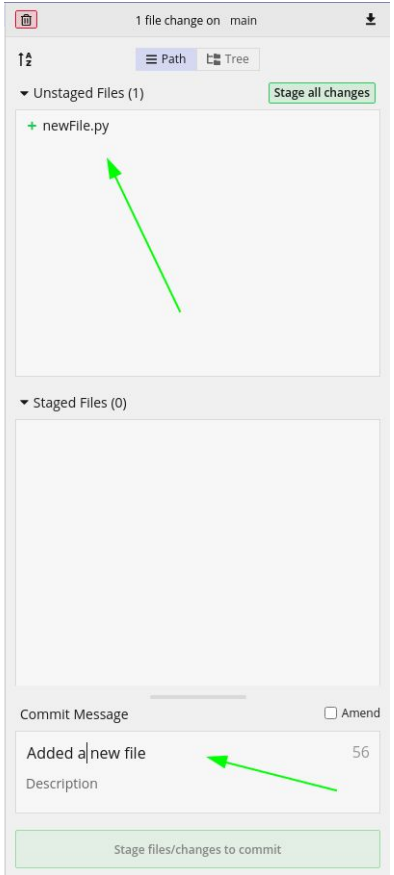
Save the local files online 1/3

Once you've finished to write your code, to save it, you need to open GitKraken and follow the steps explained in the following slides:

Save the local files online 2/3

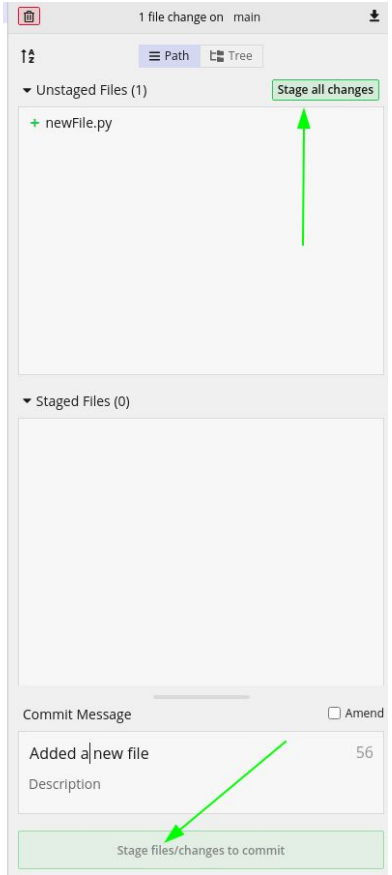
On the right side of GitKraken you will see:

- On the top: the list of the files that have been created or modified since the last time
- On the bottom: a textbox where you need to write a brief explanation of what you did since the last time (this is called *commit message* and it is mandatory)



Save the local files online 3/3

Once you've written the commit message, you can click on the button ***Stage all changes*** and then click on the button on the bottom. The last thing to do to save your file online is click on the push button and you're done!



Mission Completed! ✅

Now you can go on your dashboard and see the code saved!

Git is a really useful tool to work in groups, so we strongly recommend to use it. It could be difficult at the beginning but it offers a lot of advantages in the long run !

In any case, you can find more detailed explanation about how Git and GitKraken works here