

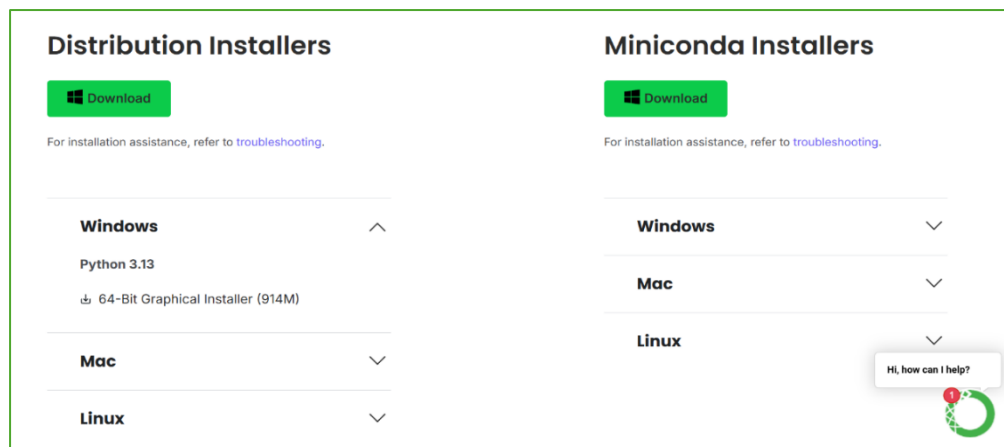
LAB 0 – Setting up the Python Environment (Anaconda + Spyder)

Objective

Install and configure the Python environment required for the course using Anaconda and Spyder.

Step 1: Install Anaconda

1. Go to the official website:
<https://www.anaconda.com/products/distribution>
2. Sign Up and Download the anaconda version for your operating system (**Windows**, **macOS**, or **Linux**).



3. Choose the **Python 3.13 (64-bit)** installer.
4. Run the installer :
 - Select “Add Anaconda to my PATH” (recommended).
 - Complete the installation with default options.
5. Verify the installation :
Open **Anaconda Prompt** (on Windows) or **Terminal** (on macOS/Linux) and type:
conda -version and **python -version**

```
Anaconda Prompt
(base) C:\Users\BIDA>conda --version
conda 25.5.1
(base) C:\Users\BIDA>python --version
Python 3.13.5
(base) C:\Users\BIDA>
```

If both commands show valid version numbers, Anaconda is correctly installed as follows:

Step 2: Open and Explore Spyder

In this course, we will use Spyder, an Integrated Development Environment (IDE) that provides:

- A console to run Python commands interactively.
- Variable explorer to inspect your data.
- Integration with libraries like matplotlib and pandas.

Launch Spyder by :

- Opening **Anaconda Navigator**, then clicking **Launch Spyder**, or
- From the Anaconda Prompt, type:

Step 3: Create a New Conda Environment

To keep our course packages organized, we create a dedicated environment named **ir_env** (Information Retrieval Environment).

```
(base) C:\Users\BIDA>conda create -n ir_env python=3.10
3 channel Terms of Service accepted
Channels:
- defaults
Platform: win-64
Collecting package metadata (repodata.json): done
Solving environment: done

==> WARNING: A newer version of conda exists. <==
current version: 25.5.1
latest version: 25.9.0

Please update conda by running

    $ conda update -n base -c defaults conda

## Package Plan ##

environment location: C:\Users\BIDA\anaconda3\envs\ir_env
```

We activate the environment each time we want to use it, since the activation is temporary and resets after the computer is restarted.

```
(base) C:\Users\BIDA>conda activate ir_env
(ir_env) C:\Users\BIDA>
```

Seeing (ir_env) before the prompt means that we are working inside this environment.