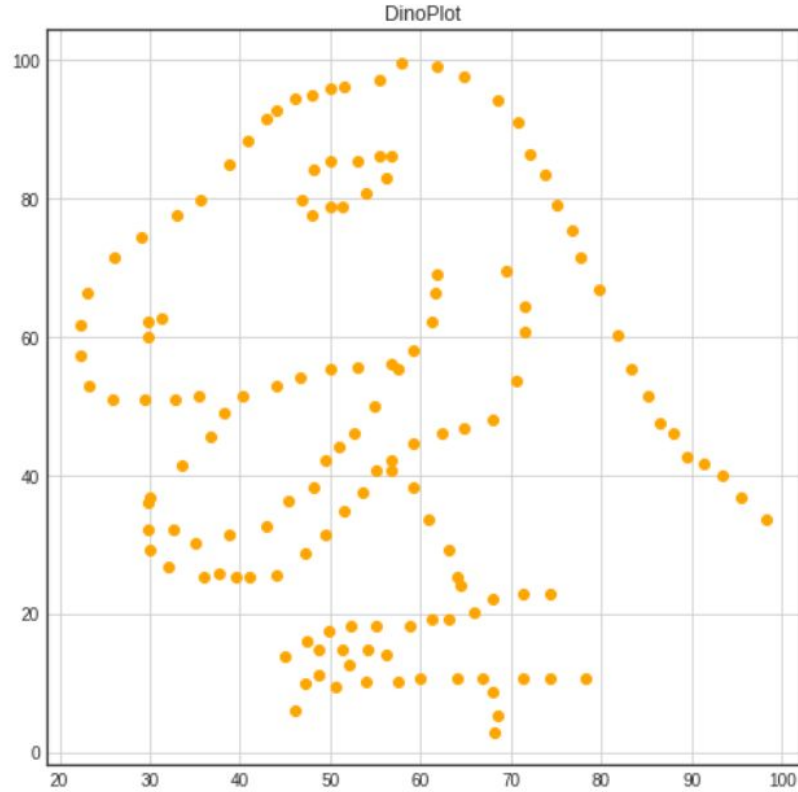


Tutorial Jupyter Notebook



Tutorial Jupyter Notebook

Contenido

- Qué es Jpnb
- Instalación
 - Web App
- Ejemplos de uso
- Markdown
- Kernels
- Entornos virtuales

Qué es

 jupyter Ej1



Logout

File Edit View Insert Cell Kernel Widgets Help

Trusted

Python 3 



Code

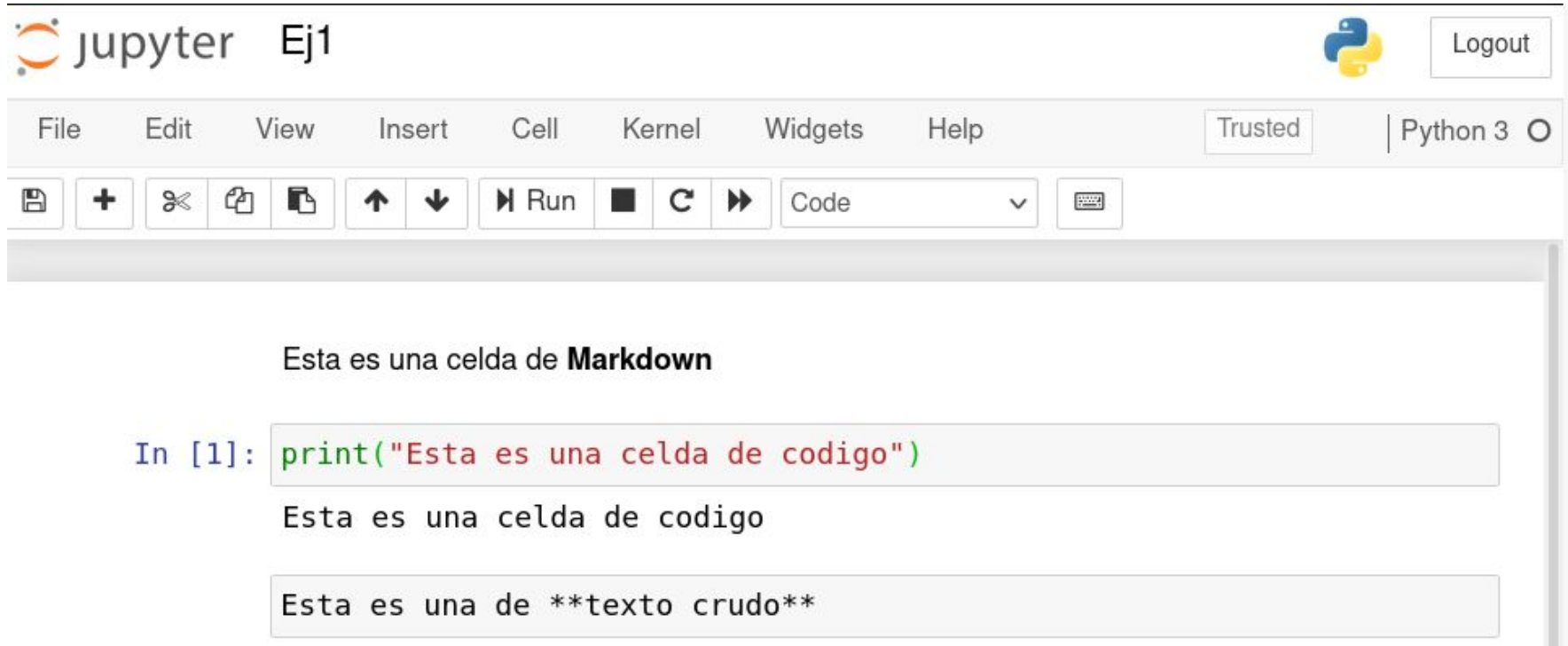


Esta es una celda de ****Markdown****

In []: `print("Esta es una celda de codigo")`

Esta es una de ****texto crudo****

Qué es



The screenshot shows a Jupyter Notebook interface. At the top, the title bar says "jupyter Ej1" on the left and has a Python logo and a "Logout" button on the right. Below the title bar is a menu bar with "File", "Edit", "View", "Insert", "Cell", "Kernel", "Widgets", and "Help". To the right of the menu bar are "Trusted" and "Python 3" buttons. Below the menu bar is a toolbar with icons for saving, adding, deleting, and duplicating cells, as well as navigation and execution buttons. The main area of the notebook contains three cells: a Markdown cell with the text "Esta es una celda de **Markdown**", a code cell with the input "In [1]: print('Esta es una celda de codigo')" and the output "Esta es una celda de codigo", and another code cell with the output "Esta es una de ****texto crudo****".

jupyter Ej1

File Edit View Insert Cell Kernel Widgets Help Trusted Python 3

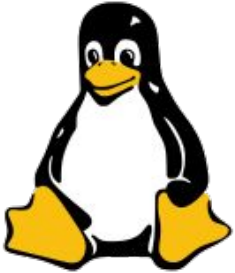
Esta es una celda de **Markdown**

In [1]: `print("Esta es una celda de codigo")`

Esta es una celda de codigo

Esta es una de ****texto crudo****

Instalación

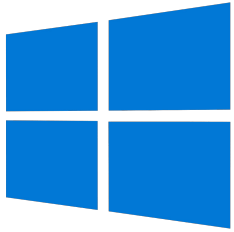


```
sudo apt update && sudo apt install jupyter notebook
```

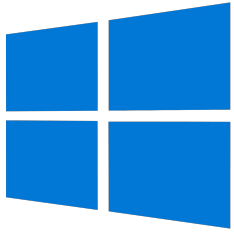
```
pip3 install notebook
```



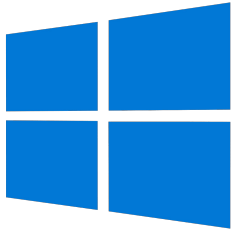
Instalación



Instalación



Instalación






```
pip3 install notebook
```




Instalación

<https://jupyter.org/try>

JupyterLab	Jupyter Notebook	Voilà
		
The latest web-based interactive development environment	The original web application for creating and sharing computational documents	Share insights by converting notebooks into interactive dashboards

Ejemplo

Markdown

jupyter Ej_Markdown Last Checkpoint: 01/04/2022 (unsaved changes)  Logout

File Edit View Insert Cell Kernel Widgets Help Trusted Python 3

Run

Sintaxis de Markdown

Más ejemplos y una guía completa de Markdown se puede encontrar en la [\[pagina web\]\(https://markdown.es/sintaxis-markdown/\)](https://markdown.es/sintaxis-markdown/) de Markdown

Titulos

Header 1

Header 2

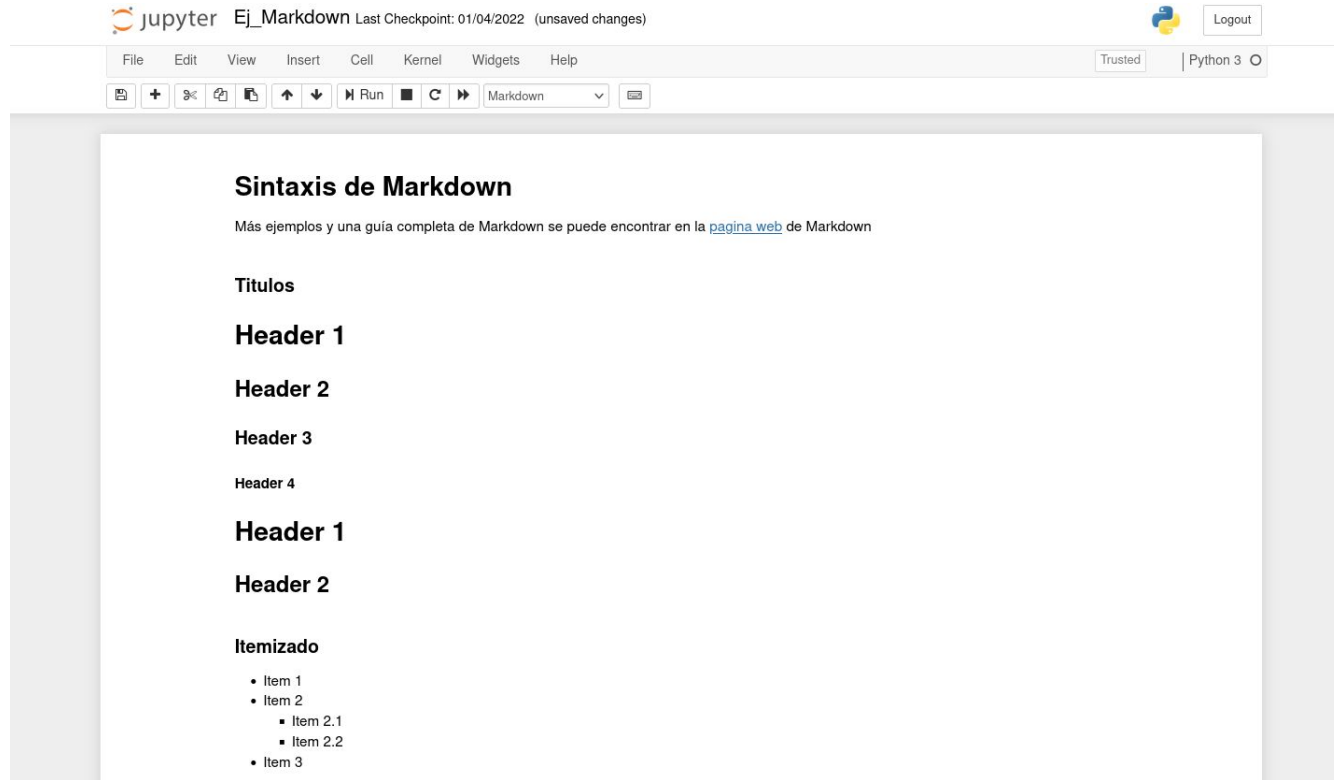
Header 3

Header 4

Header 1

Header 2

Markdown



The screenshot shows a Jupyter Notebook interface. At the top, the Jupyter logo is followed by the text "Ej_Markdown" and "Last Checkpoint: 01/04/2022 (unsaved changes)". To the right is a "Logout" button. Below this is a menu bar with "File", "Edit", "View", "Insert", "Cell", "Kernel", "Widgets", and "Help". To the right of the menu bar are "Trusted" and "Python 3" indicators. Below the menu bar is a toolbar with icons for saving, adding cells, undo, redo, running, and other functions. The main content area displays a Markdown document with the following text:

Sintaxis de Markdown

Más ejemplos y una guía completa de Markdown se puede encontrar en la [pagina web](#) de Markdown

Titulos

Header 1

Header 2

Header 3

Header 4

Header 1

Header 2

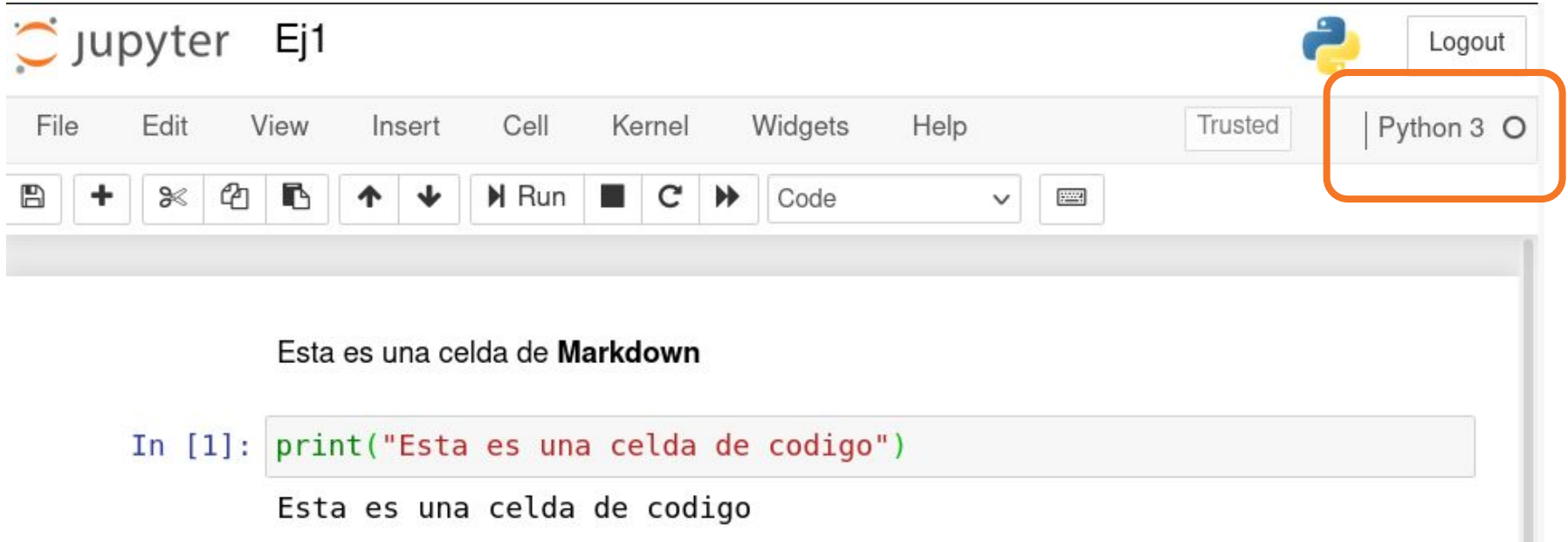
Itemizado

- Item 1
- Item 2
 - Item 2.1
 - Item 2.2
- Item 3

Markdown

<https://markdown.es/>

Manejo de Kernels



The screenshot displays the Jupyter Notebook interface. At the top left, the Jupyter logo and the text "jupyter Ej1" are visible. On the top right, there is a "Logout" button and a Python logo. Below these, a menu bar contains "File", "Edit", "View", "Insert", "Cell", "Kernel", "Widgets", and "Help". A "Trusted" button is located to the right of the menu bar. The "Kernel" menu is open, showing a dropdown with "Python 3" and a circular refresh icon. This dropdown is highlighted with an orange rectangle. Below the menu bar is a toolbar with icons for saving, adding, deleting, and running cells, as well as a "Code" dropdown. The main area of the notebook shows a Markdown cell with the text "Esta es una celda de **Markdown**". Below this is a code cell with the prompt "In [1]:" followed by the code `print("Esta es una celda de codigo")`. The output of the code cell is the text "Esta es una celda de codigo".

jupyter Ej1

Logout

File Edit View Insert Cell Kernel Widgets Help Trusted

Python 3

Esta es una celda de **Markdown**

In [1]: `print("Esta es una celda de codigo")`

Esta es una celda de codigo

Manejo de Kernels

Elegir entre distintos kernels :

- Octave
- Matlab
- Python3
- PythonN.NN
- R
- Kotlin
- Maxima

<https://github.com/jupyter/jupyter/wiki/Jupyter-kernels>

Manejo de Kernels

Instalando Kernels

```
pip install octave_kernel
```

```
conda config --add channels conda-forge  
conda install octave_kernel  
conda install texinfo # For the inline documentation (shift-tab) to appear.
```


Manejo de Kernels

jupyter Octave Last Checkpoint: 03/04/2022 (unsaved changes)



```
In [1]: display("Estoy usando Octave")
Estoy usando Octave
```

Entornos virtuales

- Diferentes versiones de python o de algún otro lenguaje.
- Librerías, paquetes o módulos para un solo proyecto en particular
- Mejorar reproducibilidad de nuestro proyecto

Entornos virtuales

```
sudo apt update
```

```
sudo apt install virtualenv
```

Entornos virtuales

Ejemplo

Entornos virtuales

Crear kernel del entorno virtual

- Instalar ipykernel
 - * En el mismo entorno virtual (hay que desactivarlo y volver a activar luego de instalar)
 - * Fuera del entorno virtual, en nuestro sistema.

Entornos virtuales

Crear kernel del entorno virtual

```
pip install ipykernel
```

```
ipython kernel install --user --name=<name> (name -> nombre de nuestro  
entorno virtual)
```

Entornos virtuales

Crear kernel del entorno virtual

Ejemplo

Enlaces útiles

- <https://github.com/ieee-frc> Repositorio de la Rama Estudiantil
- <https://github.com/ieee-frc/jpnb-tutorial> Ejemplos, instrucciones de instalacion, y slides de esta charla
- <https://markdown.es/> : Guia para Markdown
- <https://jupyter.org/> : Web de proyecto Jupyter
- <https://pypi.org/> : Repositorios para python

MUCHAS GRACIAS

