

S01 T01: Jupyter Notebook i Markdown



Markdown

Markdown is a *text-to-HTML* conversion tool for web writers. **Markdown** allows you to write using an *easy-to-read, easy-to-write* plain text format, then convert it to structurally valid **XHTML** (or **HTML**).

Table of Contents:

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- Horizontal Rule

Headers

H1 ## H2 ### H3 #### H4 ##### H5 #### H6

H1

H2

H3

H4

H5

H6

Emphasis

Emphasis, aka italics, with *asterisks* or *underscores*. Strong emphasis, aka bold, with **asterisks** or **underscores**. Combined emphasis with ***asterisks and underscores***. Strikethrough uses two tildes. ~~Scratch this~~.

Emphasis, aka italics, with *asterisks* or *underscores*.

Strong emphasis, aka bold, with **asterisks** or **underscores**.

Combined emphasis with **asterisks and underscores**.

Strikethrough uses two tildes. ~~Scratch this~~.

Lists

1. First ordered list item 2. Another item ···* Unordered sub-list. 1. Actual numbers don't matter, just that it's a number ···1. Ordered sub-list 4. And another item. ···You can have properly indented paragraphs within list items. Notice the blank line above, and the leading spaces (at least one, but we'll use three here to also align the raw Markdown). ···To have a line break without a paragraph, you will need to use two trailing spaces.····Note that this line is separate, but within the same paragraph.····(This is contrary to the typical GFM line break behaviour, where trailing spaces are not required.) * Unordered list can use asterisks - Or minuses + Or pluses

1. First ordered list item
2. Another item ···* Unordered sub-list.
3. Actual numbers don't matter, just that it's a number ···1. Ordered sub-list
4. And another item.

···You can have properly indented paragraphs within list items. Notice the blank line above, and the leading spaces (at least one, but we'll use three here to also align the raw Markdown).

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- Unordered list can use asterisks
- Or minuses
- Or pluses

Links

1. [Guia Markdown](https://www.markdownguide.org/basic-syntax/) 2. [Getting Images into Markdown](https://medium.com/markdown-monster-blog/getting-images-into-markdown-documents-and-weblog-posts-with-markdown-monster-9ec6f353d8ec) 3. [Markdown-here](https://github.com/adam-p/markdown-here/wiki/Markdown-Cheatsheet#html)

Here are some **links** that may be useful:

1. [Guía Markdown](https://www.markdownguide.org/basic-syntax/)
2. [Getting Images into Markdown](https://medium.com/markdown-monster-blog/getting-images-into-markdown-documents-and-weblog-posts-with-markdown-monster-9ec6f353d8ec)
3. [Markdown-here](https://github.com/adam-p/markdown-here/wiki/Markdown-Cheatsheet#html)

Table

Markdown | Less | Pretty --- | --- | --- *Still* | *renders* | **nicely** 1 | 2 | 3

Markdown	Less	Pretty
<i>Still</i>	renders	nicely
1	2	3

Blockquotes

This is a quote > Blockquotes are very handy in email to emulate reply text. > This line is part of the same quote.
This is a quote

Blockquotes are very handy in email to emulate reply text. This line is part of the same quote.

Inline HTML

Definition list

Is something people use sometimes.

Definition list

Is something people use sometimes.

Horizontal Rule

Three or more... --- Hyphens *** Asterisks ___ Underscores

Three or more...

Hyphens

Asterisks

Underscores

Python Exercices

Ejemplos de operaciones aritméticas:

1. Suma
2. Resta
3. Multiplicación
4. Exponente
5. División y módulo

Suma

```
In [2]: import numpy as np

# We will add all the numbers that the following list contains:

numbers_list = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
sum_numbers = 0

for n in numbers_list:
    sum_numbers += n

print('The sum of the numbers in the list is: {}'.format(sum_numbers))
```

The sum of the numbers in the list is: 55

Resta

```
In [6]: # we will enter two integers per screen to do the subtraction

num1 = input("Enter the number 1: ")
```

```
num2 = input ("Now, enter the number 2: ")

print('The subtraction of the numbers entered is:', int(num1)-int(num2))
```

Enter the number 1: 4

Now, enter the number 2: 5

The subtraction of the numbers entered is: -1

Multiplicación

```
In [7]: # we create the multiplication table of a given number

numx = int(input("Enter a number between 1 and 10: "))

for n in range(1, 11):
    print(f'{n} x {numx} = {n * numx}')
```

Enter a number between 1 and 10: 5

1 x 5 = 5

2 x 5 = 10

3 x 5 = 15

4 x 5 = 20

5 x 5 = 25

6 x 5 = 30

7 x 5 = 35

8 x 5 = 40

9 x 5 = 45

10 x 5 = 50

Exponente

```
In [10]: # we will create a function to calculate the exponential number

def pow_number(base, exponente):
    res = 1
    for i in range(exponente):
        res *= base
    return res

print("Result one: ", pow_number(3, 5))

print("Check the result two: ", (3**5))

print("Check the result three: ", pow(3,5))
```

Result one: 243

Check the result two: 243

Check the result three: 243

División

```
In [12]: # we will create a division of 2 given numbers

num1 = int(input("Enter number 1: "))
num2 = int(input("Enter number 2: "))

integer_div = num1 // num2
real_div = num1 / num2

print("Integer division result: ", integer_div)
print("Real division result: {:.2f}".format(real_div))
```

Enter number 1: 4

Enter number 2: 7

Integer division result: 0
Real division result: 0.57

Nbextensions Jupyter Notebook

http://localhost:8889/tree/Documents/Cursos/IT_Academy_Itinerari/Python/S01%20T01_Jupyter%20Notebook%20_Markdown#nbextensions_configurator

Hacienda UOC (Universitat O... UOC Bootcamps + Certif... Ingles Barcelona Activa. In... IT_Academy Blogs_Data_Science Area personal Growth Hacking wordpress_web Google Developers

jupyter

Quit Logout

Files Running Clusters Nbextensions

Configurable nbextensions

☐ disable configuration for nbextensions without explicit compatibility (they may break your notebook environment, but can be useful to show for nbextension development)

filter: by description, section, or tags

☒ (some) LaTeX environments for Jupyter

☐ AutoSaveTime

☒ Code prettify

☐ Collapsible Headings

☐ Equation Auto Numbering

☐ Exercise2

☐ Help panel

☐ Highlight selected word

☐ Isort formatter

☐ Limit Output

☐ Navigation-Hotkeys

☐ Notify

☐ Ruler

☐ ScrollDown

☒ Snippets

☒ Table of Contents (2)

☒ Variable Inspector

☐ 2to3 Converter

☐ Autoscroll

☒ Codefolding

☐ Comment/Uncomment Hotkey

☐ ExecuteTime

☒ Export Embedded HTML

☐ Hide Header

☐ highlighter

☒ jupyter-js-widgets/extension

☐ Live Markdown Preview

☒ Nbextensions dashboard tab

☒ Printview

☐ Ruler in Editor

☐ Select CodeMirror Keymap

☒ Snippets Menu

☒ table_beautifier

☐ zenmode

☐ AddBefore

☐ Cell Filter

☐ Codefolding in Editor

☒ contrib_nbextensions_help_item

☐ Execution Dependencies

☐ Freeze

☐ Hide input

☒ Hinterland

☐ Keyboard shortcut editor

☐ Load TeX macros

☒ Nbextensions edit menu item

☒ Python Markdown

☒ Runtools

☐ SKILL Syntax

☒ spellchecker

☐ Toggle all line numbers

☐ Autoprep8

☒ Code Font Size

☐ CodeMirror mode extensions

☐ datestamper

☐ Exercise

☐ Gist-It

☒ Hide input all

☐ Initialization cells

☐ Launch QtConsole

☒ Move selected cells

☐ nbTranslate

☐ Rubberband

☒ Scratchpad

☐ Skip-Traceback

☐ Split Cells Notebook

☒ Tree Filter

In []: