

# Python iPython Notebook tutorial

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## 1 iPython Notebook overview

iPython Notebook is an interactive scientific computing environment built on Python. It enables us to compose a scientific report with text (for story-telling / explanation of what is going on) and Python code for data analysis.

A notebook can be used interactively, and it can also be converted to various publication formats, including HTML (for web publication) and PDF.

## 2 Editing text in Markdown

**Markdown** is an easy text file format that allows you to write up a document and apply stylings to create highly presentable output that can be published in various ways, including as PDF and as HTML web-pages. Inspect the PDF output of this file (generated by `ipython nbconvert "Python iPython Notebook tutorial.ipynb" --to pdf`) to see how the following Markdown texts are rendered in the final PDF document.

## 3 Make a 1st-Level Header by inserting 1 hash character in front

### 3.1 Make a 2nd-Level Header by inserting 2 hash characters in front

#### 3.1.1 Make a 3rd-Level Header by inserting 3 hash characters in front

*make italic text by putting 1 star character at each end*

**make bold text by putting 2 star characters at each end**

***then, obviously, this is how to make bold italic text***

Make an numbered (ordered) list by simply putting "1.", "2.", "3.", etc., like so:

1. First item
2. Second item
3. Third item

Make an unordered list by putting "-" and a space in front of each item, like so:

- Unordered item
- Unordered item
- Unordered item

Make [hyperlinked text](#), e.g. referring to [Google.com](#) like this.

Images can be embedded easily, with a caption too, like so:

```
In [ ]: from IPython.display import Image
        Image(filename='Chicago Booth logo.jpeg')
```

```
In [ ]: # General Setups and Imports
```

```
        %matplotlib inline
```