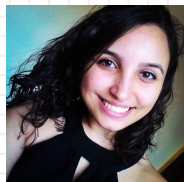


# Google Colab + SQLite

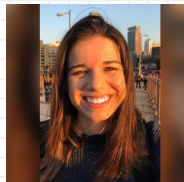


# HELLO!



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# HELLO!



## Filipe Nascimento

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Google  
Colab  
+  
Jupyter  
Notebook

Pandas  
Dataframes

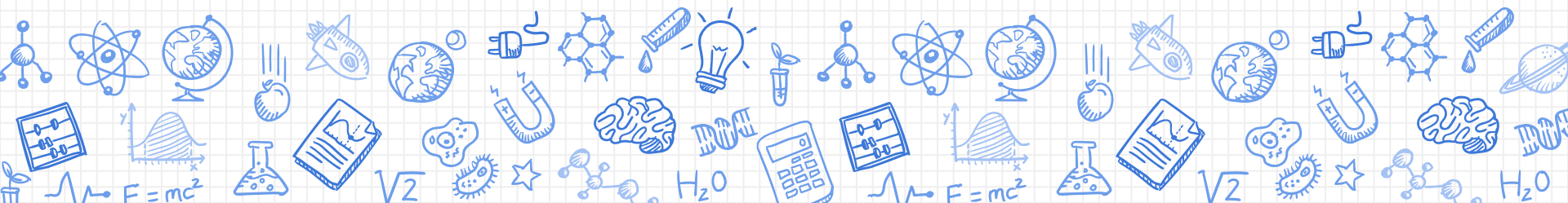
SQLite

Algumas  
Visualizações



[https://github.com/filipefbn/jupyter\\_intro\\_class\\_ibd](https://github.com/filipefbn/jupyter_intro_class_ibd)

## Apresentação da ferramenta



-



## Hello World

```
In [1]: msg = 'Hello, world!'
```

```
In [2]: msg
```

```
Out[2]: 'Hello, world!'
```

```
In [3]: print(msg)
```

```
Hello, world!
```

```
In [ ]:
```

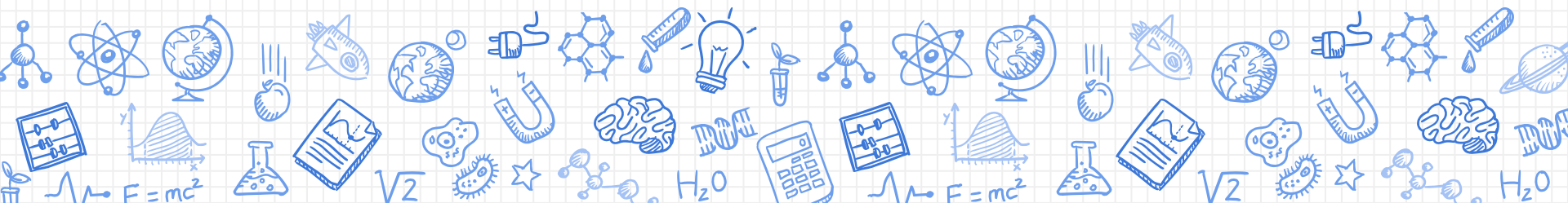
Jupyter Notebook

-



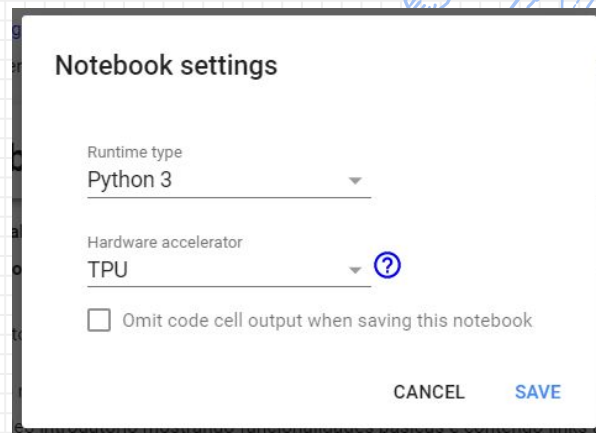
# Google Colab

Apresentação da ferramenta



## Jupyter Notebook

- ✗ Similar a um Jupyter Notebook
- ✗ Código executado em máquina virtual dedicada
- ✗ Processamento em GPUs e TPUs grátis
- ✗ Não precisa configurar nada!
- ✗ Por enquanto, só Python 2.7 e 3.6



<https://colab.research.google.com/>

Welcome To Colab

File Edit View Insert Runtime Tools Help

+ Code + Text Copy to Drive Connect Editing

Table of contents

Getting started

Data science

Machine learning

More Resources

Machine Learning Examples

SECTION

EXAMPLES RECENT GOOGLE DRIVE GITHUB UPLOAD

Enter a GitHub URL or search by organization or user ☐ Include private repos

filipefbn/jupyter\_intro\_class\_ibd

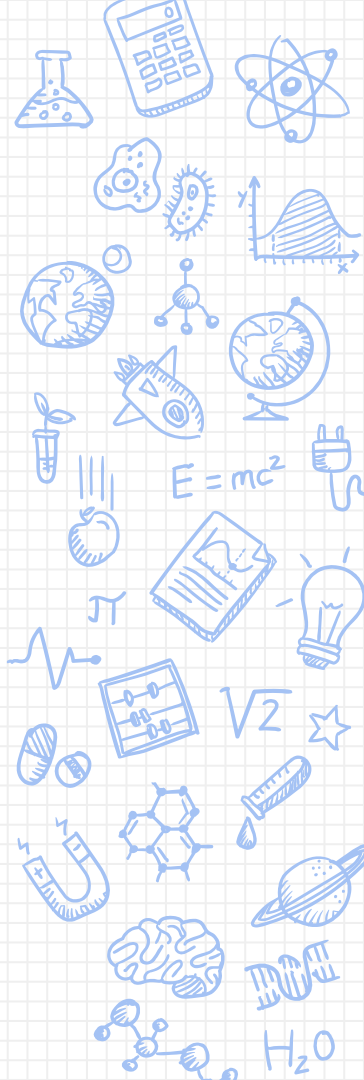
Repository: filipefbn/jupyter\_intro\_class\_ibd Branch: master

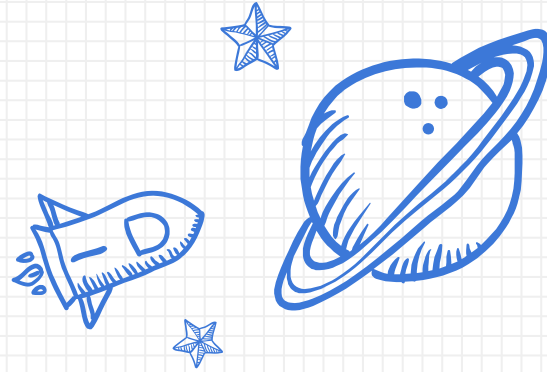
Path

- notebooks/0. Jupyter - Hello World.ipynb
- notebooks/1. Apresentação - Jupyter.ipynb
- notebooks/2. Jupyter e Pandas.ipynb
- notebooks/3. Jupyter e SQLite.ipynb

NEW PYTHON 3 NOTEBOOK CANCEL

```
[ ] seconds_in_a_week = 7 * seconds_in_a_day
seconds_in_a_week
```



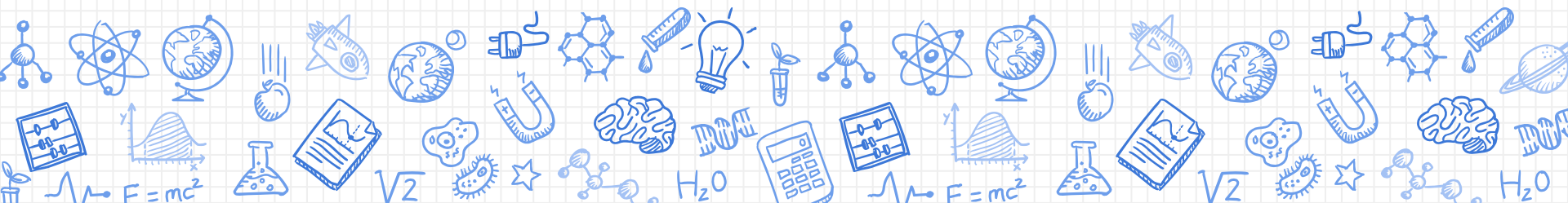


# Exemplos

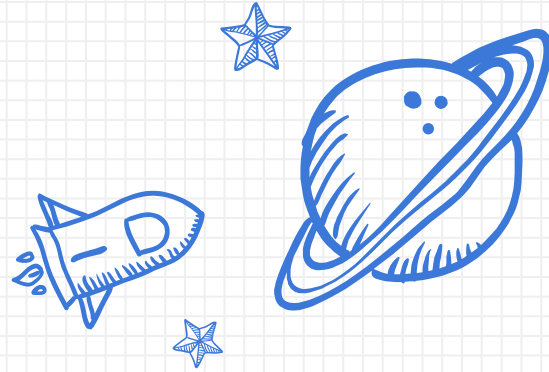
Notebook 1. Apresentação - Jupyter

# Pandas

Apresentação da biblioteca



- 14

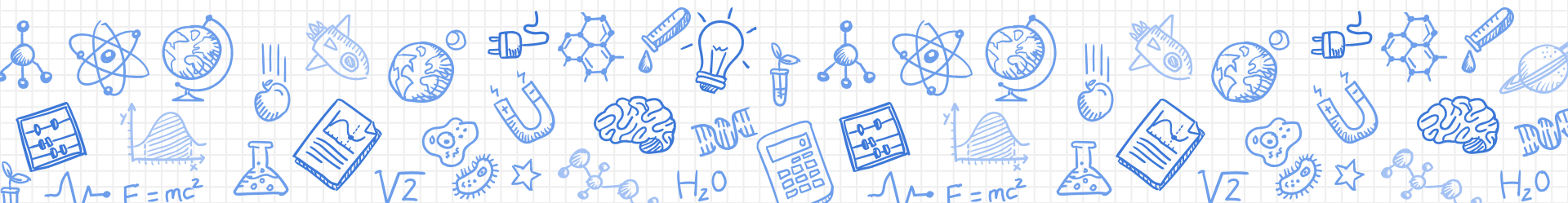


# Exemplos

Notebook 2. Jupyter e Pandas

# SQLite

# Apresentação da biblioteca

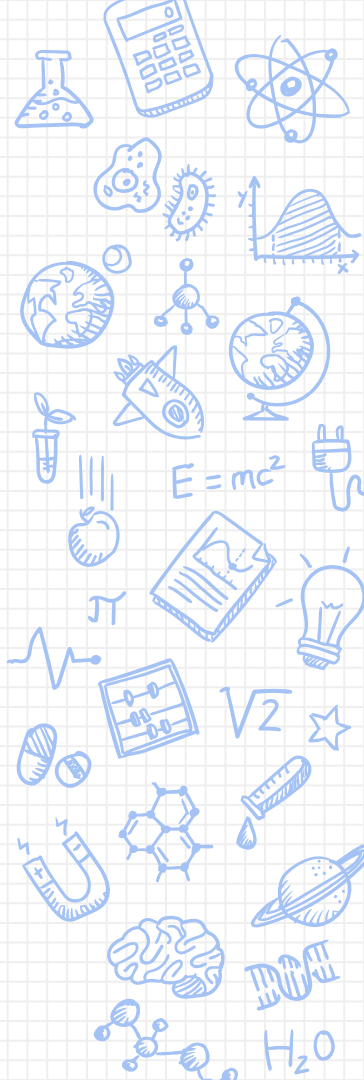


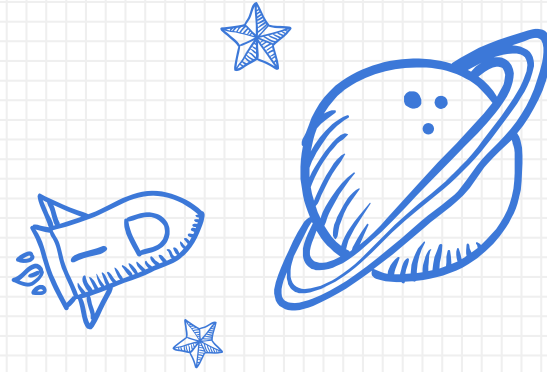


## SQLite

---

- ✗ Engine de banco de dados autocontida
- ✗ Biblioteca **sqlite3** do Python permite criar bancos e executar consultas sem nenhuma dependência adicional
- ✗ É possível utilizar de forma combinada com o Pandas



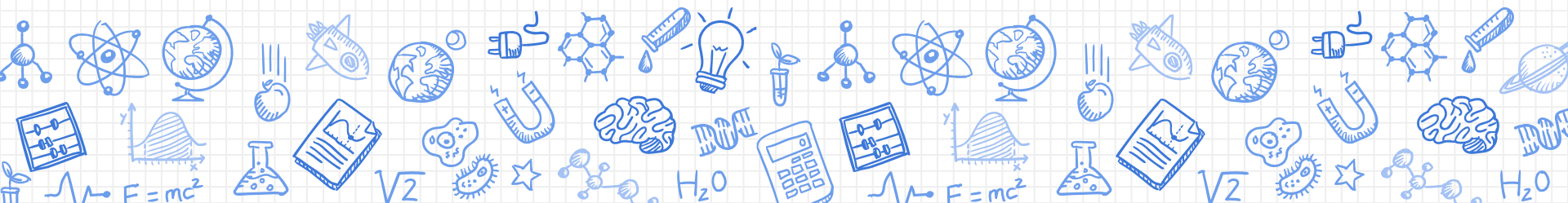


# Exemplos

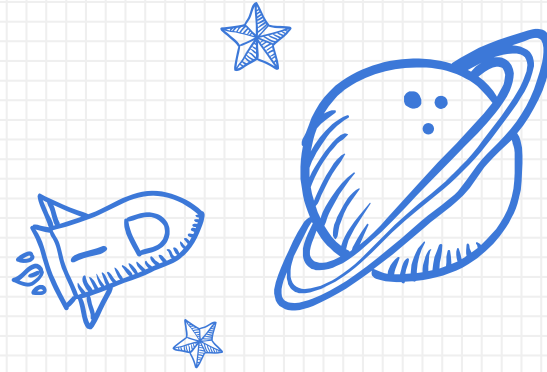
Notebook 3. Jupyter e SQLite

# Visualizações

Algumas visualizações com matplotlib

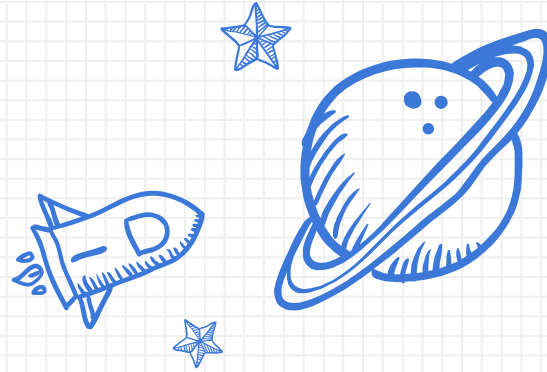


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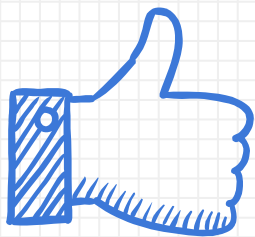
# Exemplos

Notebook 4. Algumas visualizações



# Exercícios

Notebook 5. Exercícios



# OBRIGADO!

## Dúvidas?

- ✕ Filipe Nascimento
- ✕ [filipenascimento@dcc.ufmg.br](mailto:filipenascimento@dcc.ufmg.br)

## Referências

- ✗ Projeto Jupyter: <https://jupyter.org/>
- ✗ Documentação: <https://jupyter-notebook.readthedocs.io/en/stable/>
- ✗ Guia Inicial: <https://jupyter-notebook-beginner-guide.readthedocs.io/en/latest/>

## Outras Referências

- ✗ <https://pandas.pydata.org/>
- ✗ <https://matplotlib.org/tutorials/index.html>
- ✗ <http://seaborn.pydata.org/tutorial.html>