LET'S LEARN NLP

STUDENT EDITION 2022

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CODING CURRICULUM
HACKATHON 2022


SPAM


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- 1. Let's Learn NLP - Introduction.ipynb
- 1. Let's Learn NLP - Worksheet 1.ipynb
- 2. Let's Learn NLP - Getting started with Spacy.ipynb
- 2. Let's Learn NLP - Worksheet 2.ipynb
- 3. Let's Learn NLP - Understanding word vectors.ipynb

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CONTENT

1. **Setup and Using the Course**
2. **Intro to NLP and Jupyter Notebooks**
3. **Getting started with Spacy**
4. **Understanding plain text, word embeddings**
5. **Basic Sentiment Analysis**
6. **Extraction of keywords and extractive summarization**

***Note: The content is a subject to change under further review**

LEARNING OBJECTIVES

1. **Learn how to use Jupyter Notebooks**
2. **Understand the fundamentals of NLP**
3. **Improve programming skills and learn the basics of Spacy**
4. **Use the acquired knowledge and skills in practice and apply them in simple NLP tasks**

jupyter 0. Let's Learn NLP - Introduction Last Checkpoint: Last Tuesday at 19:20 (autosaved)

Logout

File Edit View Insert Cell Kernel Widgets Help

Trusted

Python 3 (ipykernel)

Run

Markdown

Pre-requisites

Before starting this workshop, here is a list of necessary requirements:

- Access to a **PC** or **laptop** (**1** per student/group)
- **Python 3.7** or higher installed on the computer
- **Jupyter notebook** package installed (**Helpful guide**: https://jupyter.org/install)
- Have our **virtual environment** activated. It will include all the important dependencies needed to run the notebook.
- We recommend the students have some basic knowledge about **programming in Python**, however, many of the exercises will involve running simple commands and we have done our best to abstract any complicated logic away.
- There will be some use of **maths** to explain how words are stored. We recommend students have some knowledge of **vectors** and how they are added together.

Please, watch this [video](Insert YouTube link here) on how to set up before starting the course.

Learning Objectives

In this workshop, we will guide students through these sections:

IPython & ipywidgets

```
In [1]: def f(x, a, b):
            return a * x + b

In [2]: from ipywidgets import interact

In [3]: interact(f, x=(-10, 10, 1), a=(-10, 10, 1), b=(-10, 10, 1))
```

x 0

a 0

b 0

0

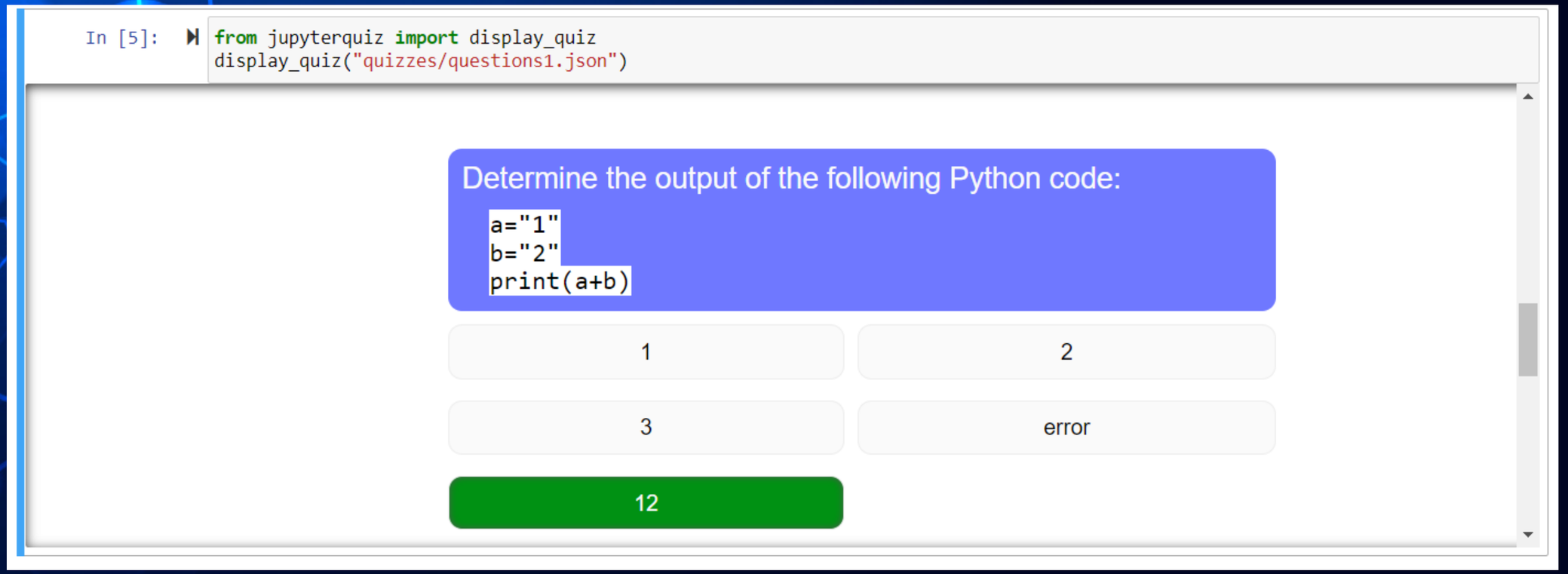
Out[3]: <function __main__.f>

Source: https://linuxtut.com/en/55dc860433d52228ce20/

```
In [1]: from IPython.display import YouTubeVideo

        video = YouTubeVideo("Ya3imMrSkW0")
        display(video)
```

jupyterquiz



https://github.com/jmshea/jupyterquiz

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