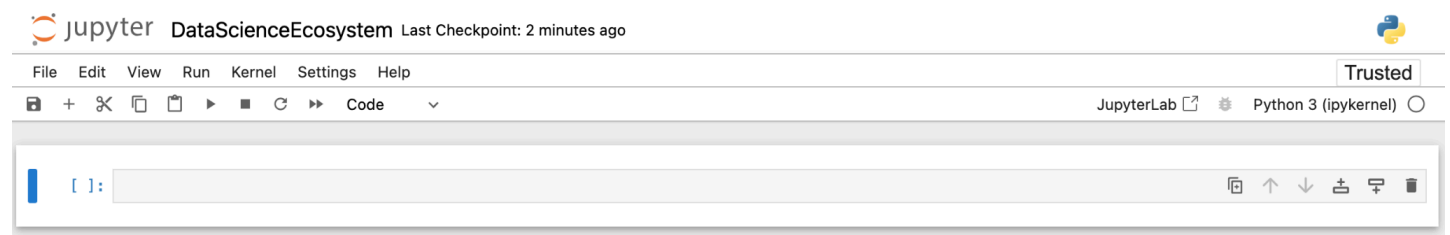


Exercise 1: Create a Jupyter Notebook

Create a new Jupyter notebook called DataScienceEcosystem.ipynb



Exercise 2: Create markdown cell with title of the notebook

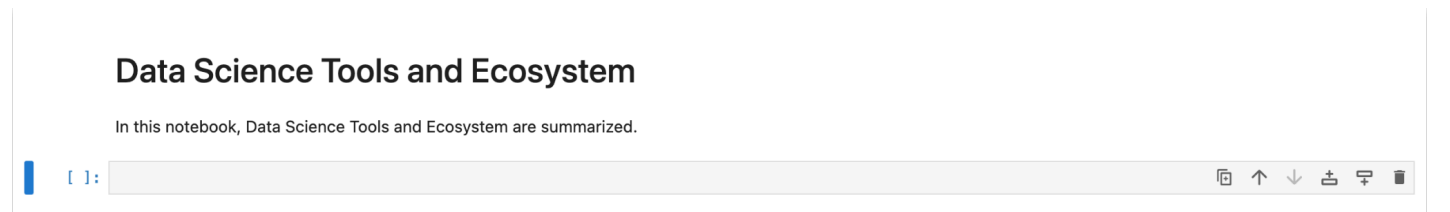
Create a markdown cell with the title 'Data Science Tools and Ecosystem' using H1 style heading.



Exercise 3 - Create a markdown cell for an introduction

Write an introductory sentence about the notebook such as the follows:

'In this notebook, Data Science Tools and Ecosystem are summarized.'



Exercise 4 - Create a markdown cell to list data science languages

Start the cell with an overview line such as:

Some of the popular languages that Data Scientists use are:

Then create an ordered list (i.e. numbered) listing 3 (or more) commonly used languages for data science.

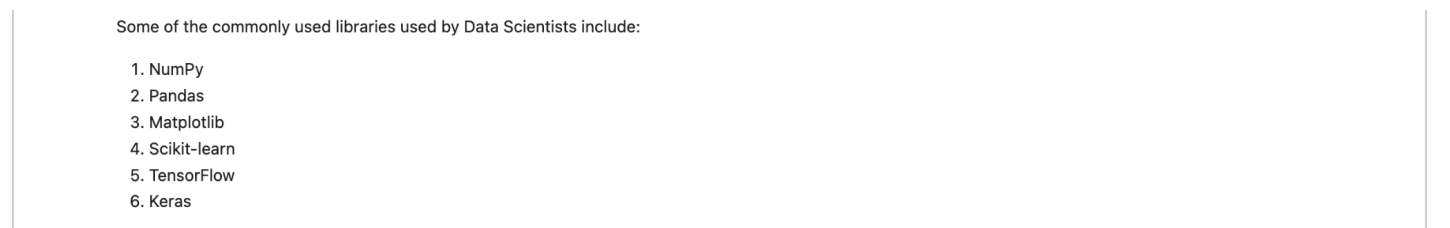


Exercise 5 - Create a markdown cell to list data science libraries

Add an overview line to the cell like:

Some of the commonly used libraries used by Data Scientists include:

Below this line add an ordered list listing 3 (or more) commonly used libraries in data science.



Exercise 6 - Create a markdown cell with a table of Data Science tools

Create a single column table in this cell with the first row containing the header Data Science Tools. The subsequent three rows in the table should indicate three development environment open source tools used in data science

Data Science Tools
Jupyter Notebook
RStudio
Apache Zeppelin

Exercise 7 - Create a markdown cell introducing arithmetic expression examples

Add a line in this cell with H3 style heading with text like:
Below are a few examples of evaluating arithmetic expressions in Python.

Below are a few examples of evaluating arithmetic expressions in Python.

```
[ ]:
```

Exercise 8 - Create a code cell to multiply and add numbers

In this code cell evaluate the expression (3*4)+5.
Insert a comment line before the expression to explain the operation e.g. This a simple arithmetic expression to mutiply then add integers.
Then execute the cell to ensure the expression returns the expected output of 17.

Below are a few examples of evaluating arithmetic expressions in Python.

```
[1]: # This is a simple arithmetic expression to multiply then add integers
(3 * 4) + 5

[1]: 17

[ ]:
```

Exercise 9 - Create a code cell to convert minutes to hours

In this code cell write an expression that converts 200 minutes into hours.
Insert a comment line before the expression to explain the operation e.g. This will convert 200 minutes to hours by diving by 60.
Run the cell to evaluate the expression.

```
[2]: # This will convert 200 minutes to hours by dividing by 60
200 / 60

[2]: 3.3333333333333335

[ ]:
```

Exercise 10 - Insert a markdown cell to list Objectives

Below the introduction cell created in Exercise 3, insert a new markdown cell to list the objectives that this notebook covered (i.e. some of the key takeaways from the course). In this new cell start with an introductory line titled: Objectives: in bold font. Then using an unordered list (bullets) indicate 3 to 5 items covered in this notebook, such as List popular languages for Data Science.

Data Science Tools and Ecosystem

In this notebook, Data Science Tools and Ecosystem are summarized.

Objectives:

- List popular languages for Data Science
- List commonly used libraries in Data Science
- Create a table of Data Science tools
- Demonstrate arithmetic expression examples in Python
- Convert minutes to hours using Python

Exercise 11 - Create a markdown cell to indicate the Author's name

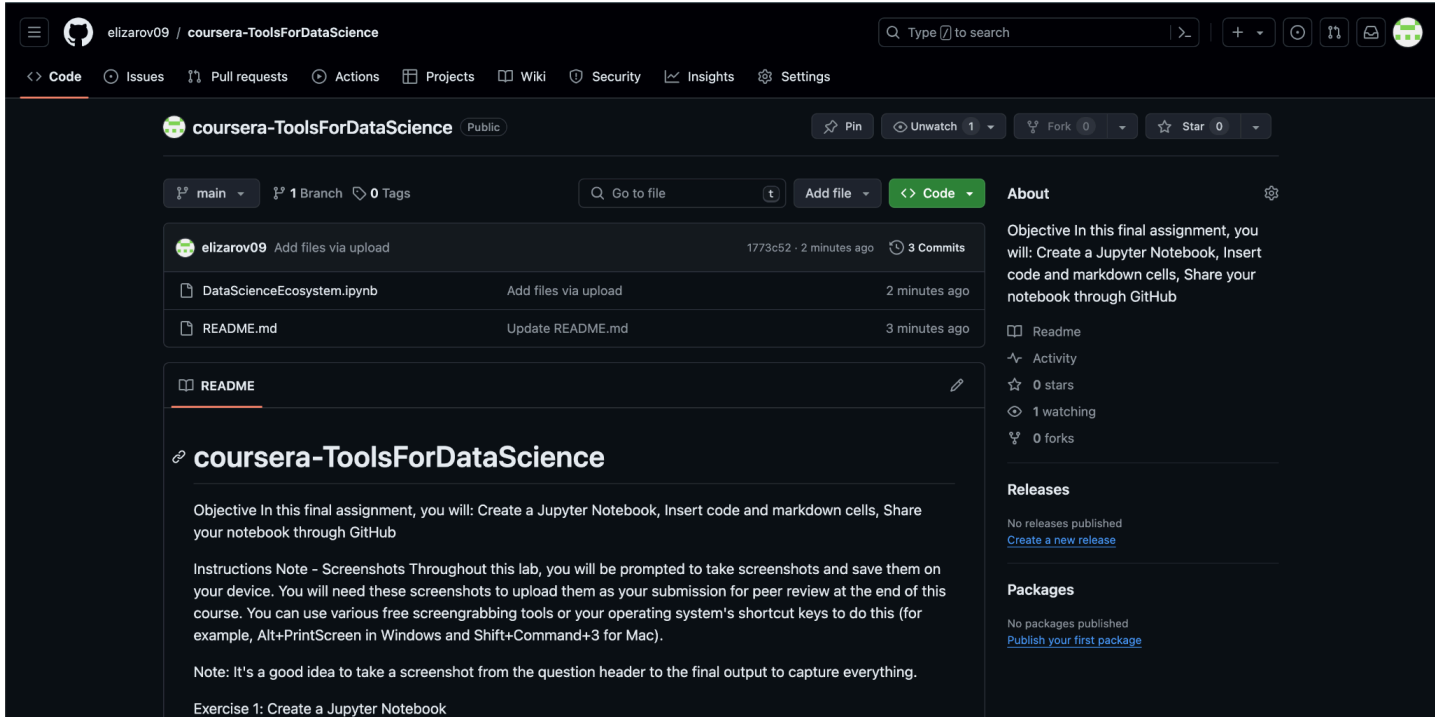
In this markdown cell markdown cell include the following text Author in H2 style heading. Include your name as regular text below the word Author.

Author

Oleg Elizarov

Exercise 12 - Share your notebook through GitHub

Upload your notebook to a public respository on GitHub.



Exercise 13 -Take a screenshot of the first page of the notebook and save it as 1-notebook.png(Images can be saved with either the .jpg or .png extension.)

jupyter

DataScienceEcosystem

Last Checkpoint: 57 minutes ago

File

Edit

View

Run

Kernel

Settings

Help

Trusted

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Markdown ▾

JupyterLab

Python 3 (ipykernel)

Data Science Tools and Ecosystem

In this notebook, Data Science Tools and Ecosystem are summarized.

Objectives:

- List popular languages for Data Science
- List commonly used libraries in Data Science
- Create a table of Data Science tools
- Demonstrate arithmetic expression examples in Python
- Convert minutes to hours using Python

Some of the popular languages that Data Scientists use are:

- Python
- R
- SQL
- Julia
- Scala

Some of the commonly used libraries used by Data Scientists include:

- NumPy
- Pandas
- Matplotlib
- Scikit-learn
- TensorFlow
- Keras

Data Science Tools

Jupyter Notebook

RStudio

Apache Zeppelin

Below are a few examples of evaluating arithmetic expressions in Python.

```
[1]: # This is a simple arithmetic expression to multiply then add integers
(3 * 4) + 5
```

```
[1]: 17
```

```
[2]: # This will convert 200 minutes to hours by dividing by 60
200 / 60
```

```
[2]: 3.3333333333333335
```

▼ Author

Oleg Elizarov