

## Exercise 1: Create a Jupyter Notebook

1. Open Jupyter Notebook or JupyterLab.
2. Create a new notebook named `DataScienceEcosystem.ipynb`.

## Exercise 2: Create Markdown Cell with Title

1. Add a new markdown cell.

Enter the following:

markdown

Copy code

# Data Science Tools and Ecosystem

- 2.
3. Take a screenshot of this markdown cell and save it as `2-title.png`.

## Exercise 3: Create Markdown Cell for Introduction

1. Add a new markdown cell.

Enter the following:

markdown

Copy code

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

- 2.
3. Take a screenshot of this markdown cell and save it as `3-intro.png`.

## Exercise 4: Create Markdown Cell to List Data Science Languages

1. Add a new markdown cell.

Enter the following:

markdown

Copy code

Some of the popular languages that Data Scientists use are:

1. Python
2. R
3. SQL

- 2.
3. Take a screenshot of this markdown cell and save it as `4-dslanguages.png`.

## Exercise 5: Create Markdown Cell to List Data Science Libraries

1. Add a new markdown cell.

Enter the following:

markdown

Copy code

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

1. Pandas
2. NumPy
3. Scikit-learn

- 2.
3. Take a screenshot of this markdown cell and save it as `5-dslibraries.png`.

## Exercise 6: Create Markdown Cell with Table of Data Science Tools

1. Add a new markdown cell.

Enter the following:

markdown

Copy code

```
| Data Science Tools |  
|-----|  
| Jupyter Notebook  |  
| RStudio           |  
| Apache Zeppelin   |
```

- 2.
3. Take a screenshot of this markdown cell and save it as `6-dstools.png`.

## Exercise 7: Create Markdown Cell Introducing Arithmetic Expression Examples

1. Add a new markdown cell.

Enter the following:

markdown

Copy code

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

- 2.

3. Take a screenshot of this markdown cell and save it as `7-introarithmetic.png`.

## Exercise 8: Create Code Cell to Multiply and Add Numbers

1. Add a new code cell.

Enter the following code:

python

Copy code

```
# This is a simple arithmetic expression to multiply then add integers
result = (3 * 4) + 5
result
```

- 2.
3. Run the cell to verify it returns `17`.
4. Take a screenshot of the code cell with output and save it as `8-multiplyandaddintegers.png`.

## Exercise 9: Create Code Cell to Convert Minutes to Hours

1. Add a new code cell.

Enter the following code:

python

Copy code

```
# This will convert 200 minutes to hours by dividing by 60
hours = 200 / 60
hours
```

- 2.
3. Run the cell to evaluate the expression.
4. Take a screenshot of the code cell with output and save it as `9-hourstominutes.png`.

## Exercise 10: Insert Markdown Cell to List Objectives

1. Add a new markdown cell below the introduction cell created in Exercise 3.

Enter the following:

markdown

Copy code

```
**Objectives:**
- List popular languages for Data Science.
- List commonly used libraries in Data Science.
```

- Create and execute arithmetic expressions in Python.
- Convert units using Python.

2.

3. Take a screenshot of this markdown cell and save it as `10-objectives.png`.

### **Exercise 11: Create Markdown Cell to Indicate Author's Name**

1. Add a new markdown cell.

Enter the following:

markdown

Copy code

`## Author`

`Sidhartha`

2.

3. Take a screenshot of this markdown cell and save it as `11-authordetails.png`.

### **Exercise 12: Share Your Notebook Through GitHub**

1. Save and download your notebook (`DataScienceEcosystem.ipynb`).
2. Upload it to a public repository on GitHub.
3. Keep the GitHub repository link handy for submission.

### **Exercise 13: Take a Screenshot of the First Page**