

DataScienceEcosystem

September 25, 2025

1 My Data Science Notebook

1.1 Introduction

Welcome to this **Data Science Notebook**! In this notebook, we will:

- Explore **data analysis** techniques
- Perform **data visualization** using Python libraries
- Execute **arithmetic operations** and basic computations
- Learn step-by-step how to work with datasets

Let's get started!

2 Yazar

2.1 Nigar Karimova

2.2 Data Science Programming Languages

Some popular languages used in Data Science are:

- Python
- R
- SQL
- Julia
- Scala
- Java

2.3 Data Science Libraries

Some popular libraries used in Data Science are:

- **Python:** NumPy, Pandas, Matplotlib, Seaborn, Scikit-learn, TensorFlow, PyTorch
- **R:** ggplot2, dplyr, caret
- **SQL:** SQLite, MySQL, PostgreSQL

2.4 Data Science Tools

Tool	Type
Python	Programming Language
R	Programming Language
SQL	Database Language
MySQL	Database Tool
MongoDB	Database Tool
Kibana	Data Visualization
Jupyter	IDE / Notebook

2.5 Arithmetic Expression Examples

In this section, we will explore basic arithmetic expressions in Python. You will learn how to perform:

- Addition (+)
- Subtraction (-)
- Multiplication (*)
- Division (/)
- Modulus (%)
- Exponentiation (**)

These examples will help you understand how Python evaluates mathematical operations.

2.6 create a code cell to multiply and add numbers

```
[2]: # Vurma və toplama əməliyyatı
(5 * 3) + 2
```

```
[2]: 17
```

2.7 Create a code cell to convert minutes to hours.

```
[3]: # Dəqiqə dəyərini təyin edək
minutes = 200

# Dəqiqələri saata çevirək
hours = minutes / 60

# Nəticəni göstərək
hours
```

```
[3]: 3.3333333333333335
```

2.8 Insert a markdown cell to list Objectives.

2.8.1 Objectives

The objectives of this notebook are:

- Understand basic data science concepts
- Learn how to perform arithmetic operations in Python
- Explore data analysis and visualization tools
- Gain hands-on experience with Jupyter Notebook

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