

Data Science Ecosystem

January 7, 2025

1 Data Science Tools and Ecosystem

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

Objectives:

- Languages that Data Scientist use.
- Common libraries used by Data Scientist.
- Some of the popular language that Data Scientist use are.
- Arithmetic expression used in Python.
- Tools used by Data Scientist.

Popular languages used by Data Scientist.

1. Python
2. R
3. SQL
4. Java

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

1. TensorFlow
2. Pandas
3. Scikit-learn
4. Apache Spark
5. Matplotlib

Three development environment open source tools used in Data Science.

Data Science tools

Jupyter Notebook
RStudio
Visual Studio

1.0.1 Below are a few examples of arithmetic expressions in Python

- Addition (+): Adds two values together.
- Subtraction (-): Subtracts the second value from the first.
- Multiplication (*): multiplies two values.
- Division (/): Divide the first value from the second.
- Exponentiation (**): Raises the first value to the power of the second.

```
[44]: ( 3 * 4 ) + 5
      # This is a simple arithmetic expression to multiply then add integers
```

```
[44]: 17
```

```
[ ]:
```

```
[48]: minutes = 200
      hours = minutes / 60
      print(hours)
      200/60
      # This will convert 200 minutes into hours by dividing 60
```

```
3.3333333333333335
```

```
[48]: 3.3333333333333335
```

```
[ ]:
```

```
[54]: minutes = 200
      hours = minutes // 60
      remaining_minutes = minutes % 60 # Use floor division to get whole hours and
      ↪remaining minutes
      print(hours)
      print(remaining_minutes)
```

```
3
20
```

```
[ ]:
```

1.1 Aurthor

Daniel Fey

```
[ ]:
```