${\it Jupyter Notebook for IBM Coursera}$

January 4, 2025

1 Data Science Tools and Ecosystem

1.1 In this notebook Data Science Tools and Ecosystem are summarized

- 1.2 Some of the popular languages that Data Scientist use are:
 - 1. Python
 - 2. R
 - 3. SQL
 - 4. Scala
 - 5. Java
 - 6. C++
 - 7. Julia
 - 8. Javascript
 - 9. Php
 - 10. Go
 - 11. Ruby
 - 12. Visual Basic

1.3 Some of the commonly used libraries used by DS include:

- 1. Pandas
- 2. numpy
- 3. matplotlib
- 4. seaborn
- 5. scikit-learn
- 6. tensorflow
- 7. pytorch
- 8. apache spark
- 9. vegas
- 10. big dl
- 11. ggplot2

1.3.1 DS Tools

Tool	Description
Jupyter	Entorno interactivo para notebooks
Git	Control de versiones y colaboración
Docker	Contenedores para despliegue de aplicaciones

Tool	Description
Apache Spark	Procesamiento de grandes volúmenes de datos
Tableau	Herramienta para visualización de datos

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

1.4.1 This is a simple arithmetic expression to multiply then add integers

(3*4)+5

```
[11]: # Multiply and Sum
    result_multiply = (3*4)+5
    print(result_multiply)

# Multiply
    result_multiply = 3 * 2
    print(result_multiply)

#Add integers
    result_sum = 3 + 2
    print(result_sum)

17
    6
    5

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

[12]: 3.333333333333333

2 Objectives

- Add comments to code cells
- Create markdown cells
- Add ordered and unordered lists to markdown cells
- Format contest or markdown cells with heading styles

3 Author

Rodrigo Sanhueza