Assignment 1 – Orientation & Setup

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Course: Applied Data Science with AI
Week #: 1
Project Title: Customer Churn Prediction

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1. Reading Summary

Reading Material:

- Data Science from Scratch – Joel Grus (Ch. 1)
- AI: A Modern Approach (Introduction)

Key Learnings:

- Data science follows a workflow: data collection, cleaning, visualization, modeling, and evaluation.
- Tools like Python, Google Colab, and GitHub are important for handling datasets and sharing projects.

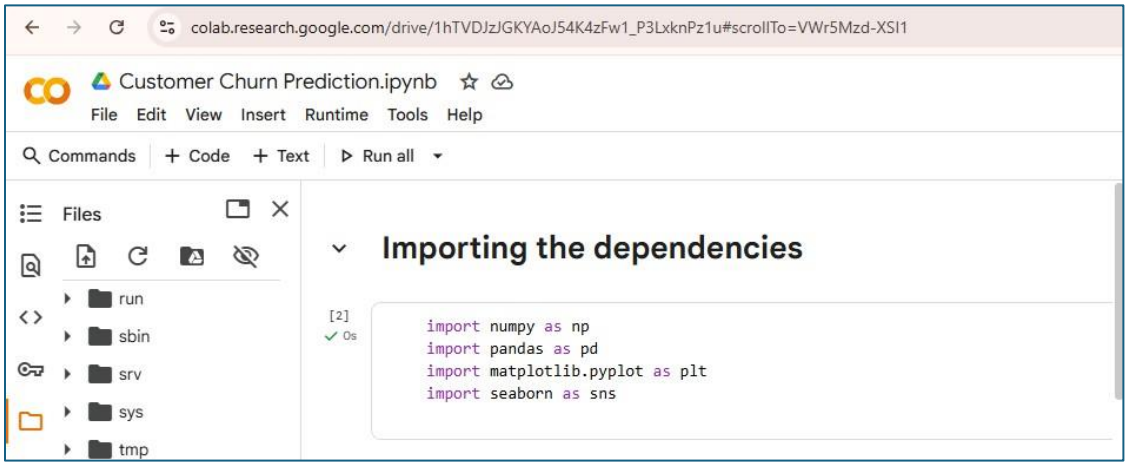
Reflection:
These readings helped me understand why Python and tools such as Colab are useful for data projects.

2. Classroom Task Documentation

Task Performed:

- Set up Colab notebook for practical work.

- Installed and imported main libraries: pandas, numpy, matplotlib, seaborn.
- Created a GitHub repository to upload assignments.



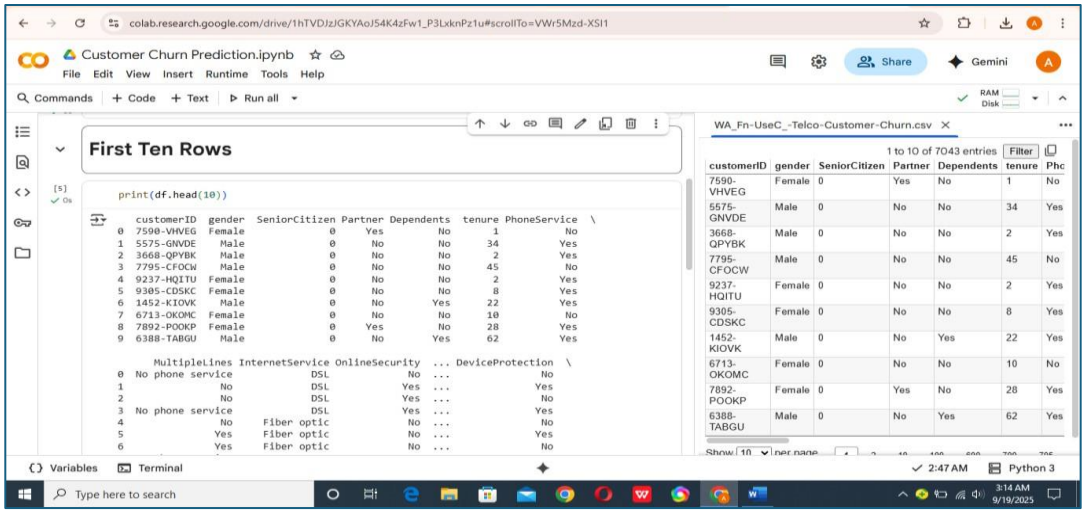
3. Weekly Assignment Submission

Assignment Title: Load and Explore Dataset

Steps Taken:

1. Downloaded **Telco Customer Churn dataset** from Kaggle.
2. Opened Colab and uploaded the CSV file.
3. Loaded the dataset into the environment.
4. Displayed the first 10 rows to check the structure and data.

Output:



Challenges Faced:

- Kaggle required login/joining competition (for Titanic).
- File path issues in Jupyter and repeated uploads in Colab.
- Titanic dataset had missing values (Age, Cabin), while Iris was cleaner.

GitHub Link:

https://github.com/Rabia-Abdul-Sattar/Customer-Churn-Prediction

5. Project Progress Milestone

- Selected project: **Customer Churn Prediction**.
- Dataset successfully loaded in Colab.
- Next week's goal: Clean the dataset and prepare it for analysis.

6. Self-Evaluation

☑ I completed all tasks on time.