



Task: Introduction to Pivoting in Pandas

Learning Objectives (To be Answered/Explored by You)

By completing this task, you must write answers in your own words **and** demonstrate with examples in code for the following:

- What pivoting is and why it is useful.
- The difference between `pivot()` and `pivot_table()` in Pandas.
- How to reshape datasets using `pivot()` and `pivot_table()`
- How to summarize and analyze data using pivoting.
- Why pivoting is useful in real-world data analysis.


Part 1: Basic Pivoting

1. Load the given dataset (`student_scores.csv`).
2. Perform the following:
 - Display the first 10 rows of the dataset.
 - Identify the columns available.
 - Choose two categorical columns and one numerical column.
3. Create and practice at least two different pivot tables using `pd.pivot_table()`.
4. Display and explain the resulting pivot tables in your own words.

Part 2: Exploring Pivot vs Pivot_Table

1. Try using both `pivot()` and `pivot_table()` on the dataset.
2. Write down the differences you observe between both methods.

Part 3: Short Question

 Give one real-life example (other than student scores) where pivoting can help simplifying analysis.

Submission: Share your code/ text file in PDF format with output.