

Classroom Assignment <6>: Pandas DataFrame – Grouping & Aggregation

Learning Objective:

Learn how to group and summarize test results in Pandas.

Expected Completion Time:

Best Case: 20 minutes

Average Case: 25 minutes

Assignment Details:

Create a Python script named **pandas_dataframe_grouping.py** that:

1. Creates a DataFrame:

TestCase	Module	Status	Duration
TC1	Login	Passed	12
TC2	Login	Failed	15
TC3	Payment	Passed	20
TC4	Payment	Failed	18
TC5	Reports	Passed	25
TC6	Reports	Passed	22

2. Groups by `Status` and counts Passed vs Failed.
3. Groups by `Module` and finds average Duration per module.

Hints to Solve:

- Use `.groupby("Status")["TestCase"].count()`.
- Use `.groupby("Module")["Duration"].mean()`.

Expected Outcome:

- Perform grouping like Excel Pivot Tables.
- Summarize test results by status and module.