

Task 02 - Custom DataFrame Transformation

- This task demonstrates how to implement custom transformations in a pandas DataFrame using `apply` and `groupby`.

Transformations Applied:

- 1 Created a new column `TotalPrice` = `Quantity * Price`.
- 2 Implemented custom function `discounted_revenue` using `apply` to calculate discounted revenue.
- 3 Generated `DiscountedRevenue` = `TotalPrice * (1 - Discount)`.

GroupBy Operation:

- Grouped the data by `Quantity` and calculated the average `DiscountedRevenue`.

Observations:

- 1 `apply()` is powerful for row-wise or column-wise custom calculations.
- 2 `groupby()` efficiently summarizes data by categorical features.
- 3 Combining `apply` and `groupby` enables flexible data analysis pipelines.