

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.