Task Report:

Creating a Custom Aggregation Function

Objective:

The objective of this task was to develop a Python script that can create a custom aggregation function, apply it to a DataFrame, and perform aggregation operations using groupby.

Task Description:

The task involved creating a custom aggregation function for use with groupby in pandas. The task required defining a custom function, applying it to a DataFrame, and performing aggregation operations.

Approach:

1. Defining a custom function: A custom function percent\_morethan\_boundary was defined to calculate the percentage of values in a series that are greater than a specified boundary.
2. Loading data: A sample dataset was loaded into a pandas DataFrame, containing information about students, subjects, and marks.
3. Grouping and aggregating data: The DataFrame was grouped by the Subject column, and the Marks column was aggregated using the custom function, along with other aggregation functions (mean and count).
4. Printing the result: The resulting DataFrame was printed to display the aggregated data.

Conclusion:

The task was successfully completed by creating a custom aggregation function, applying it to a DataFrame, and performing aggregation operations using groupby. This task demonstrates the power of pandas in creating custom aggregation functions and performing complex data analysis tasks.