Python Test

- 1. Remove Null Rows.
- 2. Split Product column into Car Make & Car Model.
- 3. Fix Date column Convert DD/MM/YYYY to be read as date instead of text.
- 4. Create a flag column to indicate rows with missing or inconsistent data. And Remove rows with amount zero & no values in other columns.
- 5. Clean the text in the City column.
- 6. Bring Region Name and country from Region Master to sales data.
- 7. Bring category from product Master to sales data.
- 8. Calculate Country-wise Sales amount.
- 9. Group by Product Car Make.
- 10. Validate the Date column for invalid dates and log them in a separate DataFrame.
- 11. Handle duplicates by keeping the latest entry based on the Date column.
- 12. Use fuzzy matching for integrating Region Name if there are slight mismatches in keys.
- 13. Calculate the percentage contribution of each product to the total sales.
- 14. Identify the top-performing product (Car Make) in each region.
- 15. Calculate quarterly sales trends for each Car Make.
- 16. Write reusable functions for each cleaning task with appropriate exception handling and logging.