Assignment #3: Transformation

Team Name:

Start Date: 13th of December 2022
Due date: 11th January 2022

1 Requirements

1. Print only necessary result
2. Usage of modules
3. Usage of functions or classes (where applicable)
4. Usage of PEP8

2 Hint

Every external library is allowed in this exercise. It can be helpful to refactor previous assignment code for best practice.

3 Exercise

3.1 Task 1

Extract the same data from the last assignment (FinancialSample.csv), but this time store it into a Pandas Dataframe. Return the last 10 entries.

3.2 Task 2

Transform the column values of **"Date"** to American format (MM/DD/YYYY) with datetime library.

3.3 Task 3

Create a new Pandas Dateframe with following columns and content (Product, Profit, COGS, Sales).

3.4 Task 4

Read the columns **"Month Number, "Month Name" and "Year** and create one single column out of it with a merged date.

3.5 Task 5

Find the position of the ten biggest local max values. A local max value is a value, that is surrounded by two lower values. For example: [1, 3, 8, 5, 10, 4] → 8 and 10 are local max values, so the result would be position 2 and position 4

3.6 Task 6

Create a new dataframe with every **X** entry of the data, use panda specific functions to achieve this (pandas is mandatory to use). **X** is the group number.

3.7 Task 7

While reading in the csv change all values in the discount column (this means in the pandas.read_csv function itself) and change the discount column values by the following logic:
if "-" and ≤ 200 → "Low"
elif > 200 and < 2000 → "Medium"
elif ≥ 2000 → "High"