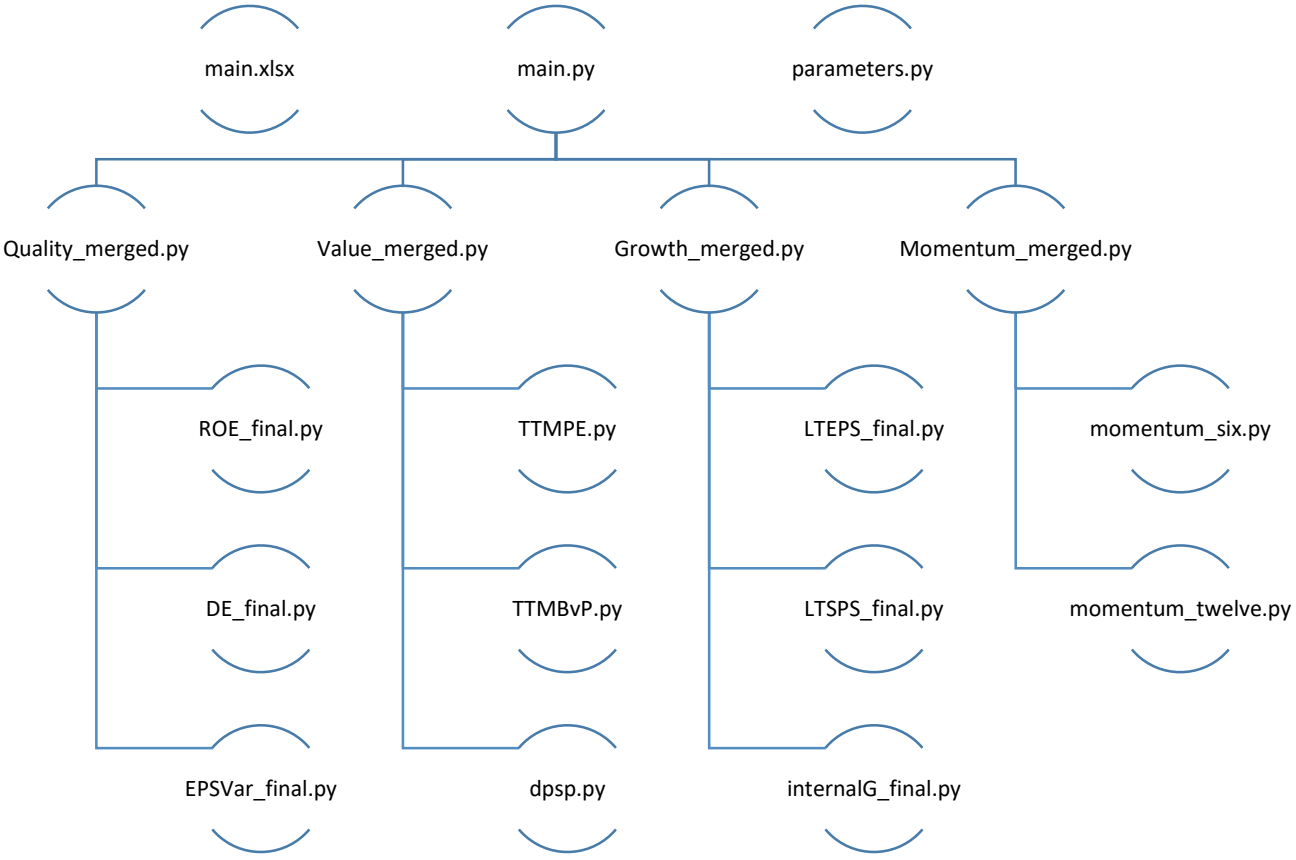
MULTI FACTOR INVESTING CODE INFORMATION & GUIDE

CODE STRUCTURE



STRUCTURE DETAILS

- main.xlsx → The output excel file
- main.py → The code file which you have to **RUN**
- parameters.py → The file contains variable parameters which can be changed
- Quality_merged.py → Runs the 3 quality sub factors
    - ROE_final.py → Calculates the ROE and its Z-Score

    - DE_final.py → Calculates the D/E and its Z-Score
    - EPSVar_final.py → Calculates the EPS Variability and its Z-Score
- Value_merged.py → Runs the 3 value sub factors
    - TTMPE.py → Calculates the TTM P/E and its Z-Score
    - TTMBvP.py → Calculates the BV/P and its Z-Score
    - dpsp.py → Calculated DPS/P and its Z-Score
- Growth_merged.py → Runs the 3 growth sub factors
    - LTEPS_final.py → Calculates LT his EPS growth and its Z-Score
    - LTSPS_final.py → Calculates LT his Sales growth and its Z-Score
    - InternalG_final.py → Calculates current internal growth rate and its Z-Score
- Momentum_merged.py → Runs the 3 momentum sub factor
    - momentum_six.py → Calculates the 6 month price momentum and its Z-Score
    - momentum_twelve.py → Calculates the 12 month price momentum and its Z-Score

DATASET USED

- "All DataSet.xlsx"
    - This excel sheet contains quarterly data for all the auto ancillary companies
- "AutoAncillaries Monthly.xlsx"
    - This excel sheet contains monthly data for all the auto ancillary companies

VARIABLES in parameters.py

1. year_end_const
    a. This variable is for quarterly year end
    b. If you want to run for latest quarter available in dataset put np.nan
    c. Else put the year & quarter in this format → 202303
    d. Caution: Don't put monthly end like 202301, only the quarterly ends
2. year_end_mon
    a. This variable is for monthly year end
    b. If you want to run for latest quarter available in dataset put np.nan
    c. Else put the year & quarter in this format → 202301
3. excel_file_path_quarterly
    a. This variable is the file path for quarterly data excel sheet
4. excel_file_path_monthly
    a. This variable is the file path for monthly data excel sheet
5. how_many_year_back
    a. This variable is only for LTEPS_final.py and LTSPS_final.py files

    b. If you want to calculate for last 3 years then put 3, if for last 5 years then 5
6. rolling_quarters
    a. This variable is only for EPSVar_final.py
    b. If you want to calculate for last 3 years EPS then put 8, for 5 years put 17
7. ROE_ratio
    a. The weightage you want to give to ROE factor of Quality
8. DE_ratio
    a. The weightage you want to give to DE factor of Quality
9. EPSVar_ratio
    a. The weightage you want to give to EPS Variability factor of Quality
10. TTMPE_ratio
    a. The weightage you want to give to TTM P/E factor of Value
11. TTMBvP_ratio
    a. The weightage you want to give to BV/P factor of Value
12. DPSP_ratio
    a. The weightage you want to give to DPS/P factor of Value
13. LTEPS_ratio
    a. The weightage you want to give to LT his EPS growth of Growth
14. LTSPS_ratio
    a. The weightage you want to give to LT his Sales growth of Growth
15. internalG_ratio
    a. The weightage you want to give to current internal growth rate of Growth
16. momentum_six_ratio
    a. The weightage you want to give to 6-month price momentum of Momentum
17. momentum_twelve_ratio
    a. The weightage you want to give to 12-month price momentum of Momentum
18. Quality_ratio
    a. Weight given to Quality factor
19. Value_ratio
    a. Weight given to Value factor
20. Growth_ratio
    a. Weight given to Growth factor
21. Momentum_ratio
    a. Weight given to Momentum factor

CODE EXECUTION