

1. Our main program is run in **main.py**. You can simply run it, and all other programs are automatically imported into **main.py**. It will run the in-sample test and out-of-sample tests, and give out the results of these tests.
2. **HRP.py** contains all the code in calculating the HRP methods, including tree clustering, quasi diagonalization and bisection. **MVP.py** contains all the code in calculating mean variance portfolios, both with and without constraints, and including CLA method, simulation method. It also includes a function of plotting the frontier efficient.
3. **Portfolio_Models.py** contains three classes: `models`, `in_test`, `out_test`.
4. **HRP.ipynb** is a jupyter notebook we used to do test and research on HRP model. It was also used to make plots of tree clustering and several heatmaps.