Read me

1. Please keep the directory structure, as our simulation environment requires.
2. Code list:
    a. OLMAR-1, and OLMAR-2: '\OLMAR\Code\OLMAR*.m'
    b. Market: '\OLMAR\Code\market*.m'
    c. Best-Stock: '\OLMAR\Code\best*.m'
    d. BCRP: '\OLMAR\Code\bcrp'
3. Dataset list:
    a. NYSE (O): '\OLMAR\Data\nyse_o.mat'
    b. NYSE (N): '\OLMAR\Data\nyse_n.mat'
    c. TSE: '\OLMAR\Data\tse.mat'
    d. SP500: '\OLMAR\Data\sp500.mat'
    e. MSCI: '\OLMAR\Data\msci.mat'
    f. DJIA: '\OLMAR\Data\djia.mat'
4. Log files are located in '\OLMAR\Log\'.
5. Sample running logs are provided.
    a. Sample running logs are located in '\OLMAR\Log\Log\'
    b. Sample .mat files are located in '\OLMAR\Log\Mat\'

USAGE: (demo_manager.m)

1. Our back tests are based on a unified test manager (demo_manager.m). It can load the datasets, call the algorithm, log and time the running procedure. Its usage is as follows and options controls the running environments (detail can be found in the head of demo_manager.m, or 'help demo_manager').
   demo_manager(strategy_name, dataset_name, parameters, options)

2. For each algorithm, *_start.m is the entry file, *_run.m is the core running file. For example, for OLMAR algorithm, OLMAR_start.m is the entry file, OLMAR_run.m is the core running file.
3. All datasets file are read from '\OLMAR\Data\'. All log files are stored in '\OLMAR\Log\'.
4. Example:
    a. Run OLMAR-1 algorithm on NYSE_O dataset with parameter setting epsilon = 10, window size = 5 and transaction costs = 0:
    demo_manager('OLMAR1_start', 'nyse_o', {10, 5, 0}, opts);

    b. Run OLMAR-2 algorithm on NYSE_O dataset with parameter setting esilon = 10, alpha = 500 and transaction costs 0:
    demo_manager('OLMAR2_start', 'nyse_o', {10, 0.5, 0}, opts);

Sample Commands: (Matlab, in '\OLMAR\Code\' folder)

1. Running all codes on one dataset (default is nyse_o. One can change it by setting dataset in demo_all.m)

demo_all; % Run sample demo on nyse_o dataset

2. Running one algorithm on one dataset

% Set simulation variables (Required)

opts.quiet_mode = 0; % Display nothing. 0: display; 1: no display
opts.display_interval = 500; % If display, the display interval
opts.log_mode = 1; % Write .txt log file. 0: no log; 1: write log
opts.mat_mode = 1; % Write .mat log file. 0: no mat; 1: write mat
opts.analyze_mode = 1; % Analyze and display info. 0: no; 1: yes
opts.his = 0; % Historical Mode. 0: no; 1: yes

% Run OLMAR-1 on NYSE (O) with \epsilon = 10, w=5 and transaction costs = 0

demo_manager('OLMAR1_start', 'nyse_o', {10, 5, 0}, opts);

% Run OLMAR-2 on TSE with \epsilon = 10, \alpha = 0.5 and transaction costs = 0

demo_manager('OLMAR2_start', 'tse', {10, 0.5, 0}, opts);

% Run Market on SP500 dataset with transaction costs = 0

Demo_manager('market_start', 'sp500', {0}, opts);