## All features

## Set route to the directory

```
m file path = pwd;
m_files = dir(m_file_path);
filename = struct2cell(m files);
freq = [1,5,10,20,50,100];
fid = fopen('kick back.txt');
A = textscan(fid, '%s', 'delimiter', ', ');
key = cellstr(A{1,1});
p = 1;
for i = 1:length(filename(1,:))
    name = filename(1,i);
    if isempty(strfind(char(name),'.mat')) == 1
        continue
    else
    disp(char(name))
    name1 = char(name);
    data = load(name1);
    data = data.data1;
    name1 = name1(1:13);
    for j = 1:length(key)
        if strcmp(key_(j),name1) == 1
            key = str2num(cell2mat(key (j+1)));
            break;
        end
    end
    T = length(data.Asset Price);
    num of freq = length(freq);
    PnL = zeros(T, num of freq);
    cost = zeros(T, num of freq);
    C0 = data.Call Price(key);
    P0 = data.Put Price(key);
    for n = 1:num of freq
        f = freq(n);
        cost(key,n) = data.Asset_Price(key) * data.Delta(key);
        for m = key+1:T
            if \mod((m-key),f) == 0
                cost(m,n) = cost((m-f),n) + (data.Delta(m) - data.Delta(m-f))*...
                    data.Asset Price(m);
                PnL(m,n) = data.Call Price(m) + data.Put Price(m) - ...
                    C0 - P0 + cost((m-f),n) - data.Delta(m-f)*data.Asset_Price(m);
            else
                cost(m,n) = cost((m-1),n);
                PnL(m,n) = PnL((m-1),n);
            end
        end
    end
    PnL straddle = straddle(data, key, freq);
```

```
PnL hedge = hedge(data, key, freq);
    tur graph = [m file path,'\Tur regime\',name1];
양
    figure(p)
     plot(PnL((key:end),:));
응
     legend(num2str(freq'))
응
양
     title([name1,'P&L'])
응
     savefig(tur graph);
     p = p + 1;
     figure(p)
양
     plot(data.Asset Price);
     title(name1)
00
     p = p + 1;
응
     figure(p)
     plot(PnL hedge((key:end),:));
응
     legend(num2str(freq'))
응
     title([name1, 'P&LHedge'])
응
응
    p = p + 1;
   figure(p)
    plot(PnL_straddle((key:end),:));
   legend(num2str(freq'))
   title([name1, 'P&LStraddle'])
    p = p + 1;
    end
end
```

```
AAPLX20180205.mat
AAXXX20180221.mat
AGNXX20180221.mat
AXPXX20180205.mat
BAXXX20180205.mat
BHGEX20180205.mat
CMCSX20180205.mat
COFXX20180205.mat
HFCXX20180205.mat
KEMXX20180205.mat
```



















