Matlab Graph Scatter Plot Examples

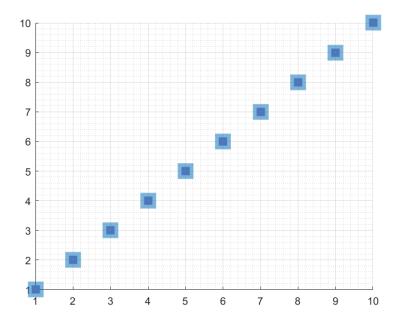
back to Fan's Reusable Matlab Repository or Dynamic Asset Repository

Scatter Plot Example

The plot below as square scatter points, each one with think border. Can set transparency of border/edge and inside separately.

```
close all;
figure();
size = 100;
s = scatter(1:10,1:10,size);

s.Marker = 's';
% color picked by using: uisetcolor
s.MarkerEdgeColor = [0     0.4471     0.7412];
s.MarkerEdgeAlpha = 0.5;
s.MarkerFaceColor = [.61     .51     .74];
s.MarkerFaceAlpha = 1.0;
s.LineWidth = 10;
grid on;
grid minor;
```



```
% 'o' Circle
% '+' Plus sign
% '*' Asterisk
% '.' Point
% 'x' Cross
% 'square' or 's' Square
% 'diamond' or 'd' Diamond
% '^' Upward-pointing triangle
% 'v' Downward-pointing triangle
```

```
% '>' Right-pointing triangle
% '<' Left-pointing triangle
% 'pentagram' or 'p' Five-pointed star (pentagram)
% 'hexagram' or 'h' Six-pointed star (hexagram)
% 'none' No markers</pre>
```

Scatter with Edge and Face Color and Transparency

Here is another way to Set Scatter Edge and Fac Colors and Transparencies.

```
% Generate Data
rng(123);
it x n = 10;
it_x_groups_n = 3;
mat_y = rand([it_x_n, it_x_groups_n]);
mat_y = mat_y + sqrt(1:it_x_groups_n);
mat_y = mat_y + log(1:it_x_n)';
ar_x = 1:1:it_x_n;
% Colors
blue = [57 106 177]./255;
red = [204 \ 37 \ 41]./255;
black = [83 81 84]./255;
green = [62 \ 150 \ 81]./255;
brown = [146 \ 36 \ 40]./255;
purple = [107 76 154]./255;
cl_colors = {blue, red, black, ...
             green, brown, purple};
% Scatter Shapes
cl_scatter_shapes = {'s','x','o','d','p','*'};
% Scatter Sizes
cl_scatter_sizes = {100,100,50,50,50,50};
% Legend Keys
cl legend = {'For Borr', 'Inf Borr', 'For+Inf Br'};
% Plot
figure();
hold on;
for it_m = 1:it_x_groups_n
    scatter(ar_x, mat_y(:,it_m), cl_scatter_sizes{it_m}, ...
        'Marker', cl_scatter_shapes{it_m}, ...
        'MarkerEdgeColor', cl_colors{it_m}, 'MarkerFaceAlpha', 0.8, ...
        'MarkerFaceColor', cl_colors{it_m}, 'MarkerEdgeAlpha', 0.8);
    cl_legend{it_m} = cl_legend{it_m};
end
legend(cl_legend, 'Location', 'best');
grid on;
grid minor;
```

