
```
clc
clear
close all

x = [-0.5; 0.5; 0];
y = [0;0;10];

B = [y(2)-y(3), 0, y(3)-y(1), 0, y(1)-y(2),0;
      0, x(3)-x(2), 0, x(1)-x(3), 0, x(2)-x(1);
      x(3)-x(2), y(2)-y(3), x(1)-x(3), y(3)-y(1), x(2)-x(1), y(1)-y(2)];

B = B.*(1/((x(1)-x(3))*(y(2)-y(3)) - (x(2)-x(3)).*(y(1)-y(3)) ));

E = 100E9;
v = 0;

D = E./(1-v^2)*[1, v, 0;
                 v, 1, 0;
                 0, 0, (1-v)/2];

B = B(:,1:4);

k = B'*D*B*5;

F = 5/3*[0;1E5;0;1E5] + [0;50E3;0;50E3];

q = k\F
```

Published with MATLAB® R2022b