```
function Assignment_2_9
clear all
x0=[0.1 0.1 0.1 0.1 0.1 0.1 0.1]'; %initial guess
x =fsolve(@myfun,x0);
vpa(x,4)
end

function F=myfun(x)
l=[100,100,200,75,100,75,50];
F=[x(1)-x(2)-x(6); % q1 = q2+q6
x(1)-x(7);         % q1 = q7
x(2)-x(3)-x(4);    % q2 = q3 + q4
x(2)-x(5);         % q5 = q3 + q4 = q2
l(3)*x(3)^2-l(4)*x(4)^2;
l(2)*x(2)^2+l(4)*x(4)^2+l(5)*x(5)^2-l(6)*x(6)^2;
l(1)*x(1)^2+l(6)*x(6)^2+l(7)*x(7)^2-5.2*10^5*pi^2*0.2^5/8/0.02/998];
end
```

```
Equation solved.

fsolve completed because the vector of function values is near zero
as measured by the default value of the function tolerance, and
the problem appears regular as measured by the gradient.
```

```
ans =

  0.2388
 0.08694
 0.03302
 0.05392
 0.08694
  0.1519
  0.2388
```

Published with MATLAB® R2015a