```
%Interpolation,Problem 3
close all; clear all; clc;
n=input('Number of data points:');
for i=1:n
 x(i)=input('x value:');
 y(i)=input('y value:');
end
interp_mode=input('Press 1 for linear and 2 for polynomial:');
xn=x(1):0.1:x (end);
if interp_mode == 1
    yn  = linear_interp( x,y,xn );
else
    yn = polynomial_interp(x,y,xn);
end
plot(x,y,'o',xn,yn);
```