```matlab
% Population of Panama
clear p
clear t
ti = 2007; %this is the left endpoint
 h = 1; %step size
 r = 0.0175899; % this is the rate constant, equal to the average of
 ln(P1/P0) and ln(P9/P0)
 tf = 2016;% this is the right endpoint of the interval
 n = (tf - ti)/h; % total number of steps
 t(1)=ti; % starting value
 p(1)= 3453807; %initial of population

 for j=1:n
     t(j+1) = h +t(j);
     p(j+1) = p(j)+h*(r*p(j));
 end


figure(1)
 W=plot(t,p)

 xlabel('year');
 ylabel('number of people');

 title('Population of Panama');

 hold on %Allows us to plot multiple solutions on same graph
 grid on % adds grid

Y = 2007:1:2016;

%here I put the array of population values I got from world bank
P = [3453807 3516268 3579385 3643222 3707782 3772938 3838462 3903986
 3969249 4034119];
 S=plot(Y,P, 'r');

legend({'Euler Approximation','Actual data from
 surveys'},'Location','northeast');


W =

  Line with properties:

              Color: [0 0.4470 0.7410]
          LineStyle: '-'
          LineWidth: 0.5000
             Marker: 'none'
         MarkerSize: 6
    MarkerFaceColor: 'none'
              XData: [2007 2008 2009 2010 2011 2012 2013 2014 2015
 2016]
```
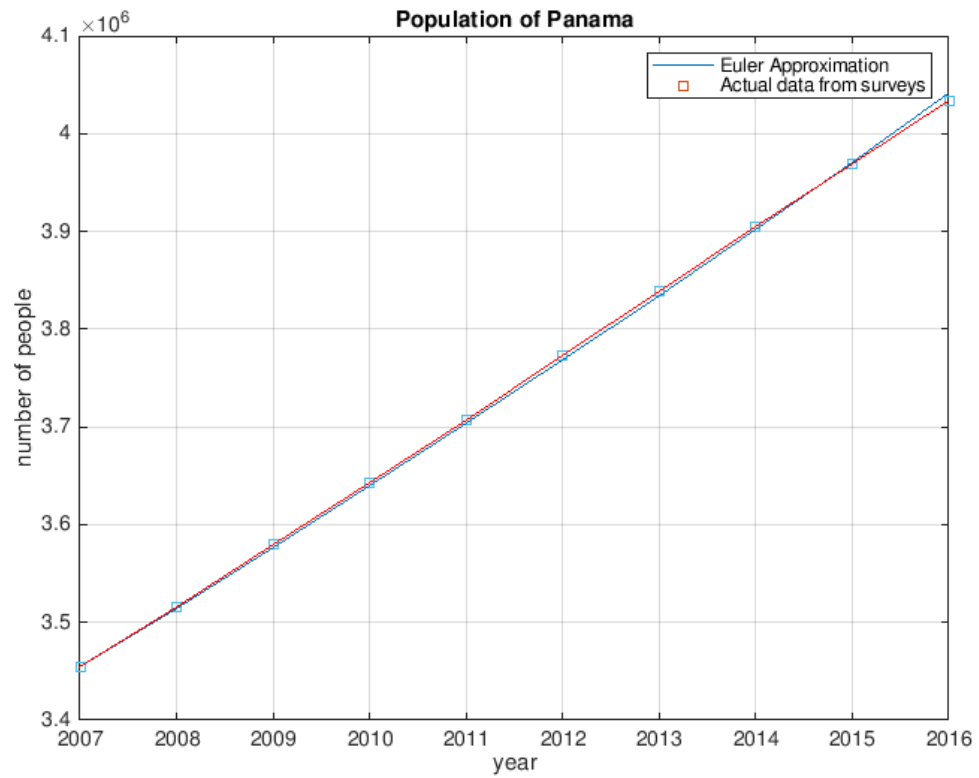
```
        YData: [1×10 double]
        ZData: [1×0 double]
```

Use GET to show all properties

Population of Panama

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