```
%%6-36 Question

years = ones(1,11) * 2000;
adding = [0:10];
years = (years+adding)' ;
netGen =
 [3802105;3736644;3858452;3883185;3970555;4055423;4064702;4156745;4119388;3950331;
```

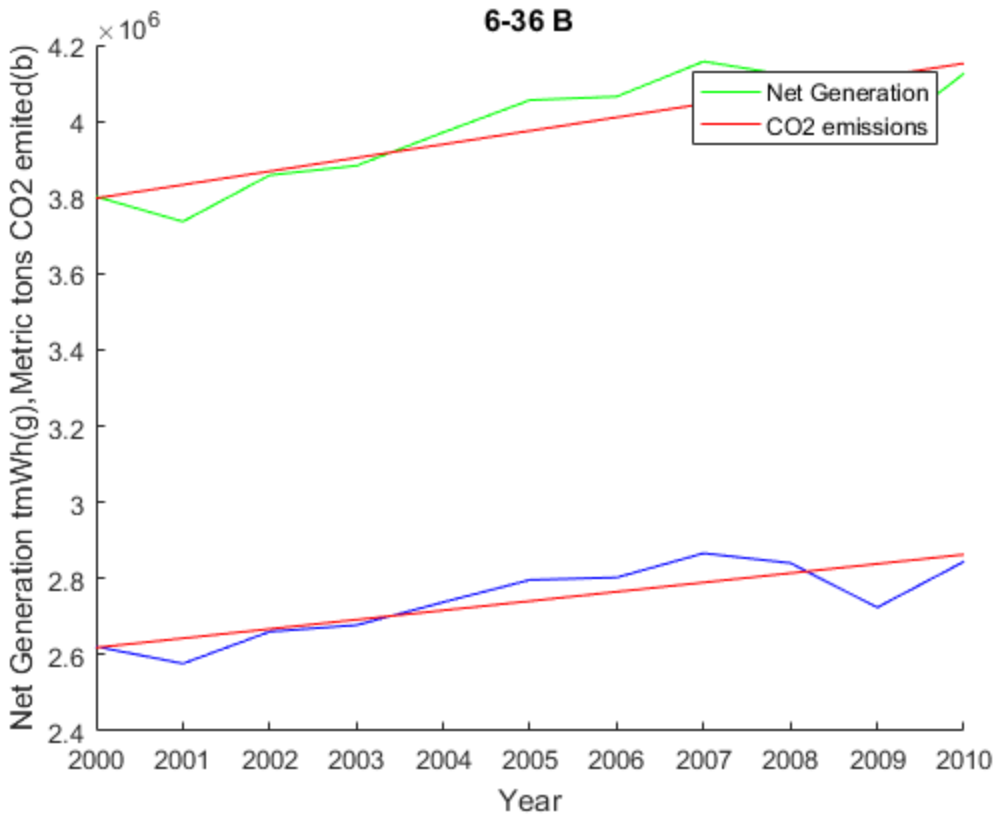
Part a

```
emissions = netGen* .68956


years1 = ones(1,51) * 2000;
adding = [0:50];
years1 = (years1+adding)' ;


emissions =

   1.0e+06 *

    2.6218
    2.5766
    2.6606
    2.6777
    2.7379
    2.7965
    2.8029
    2.8663
    2.8406
    2.7240
    2.8445
```

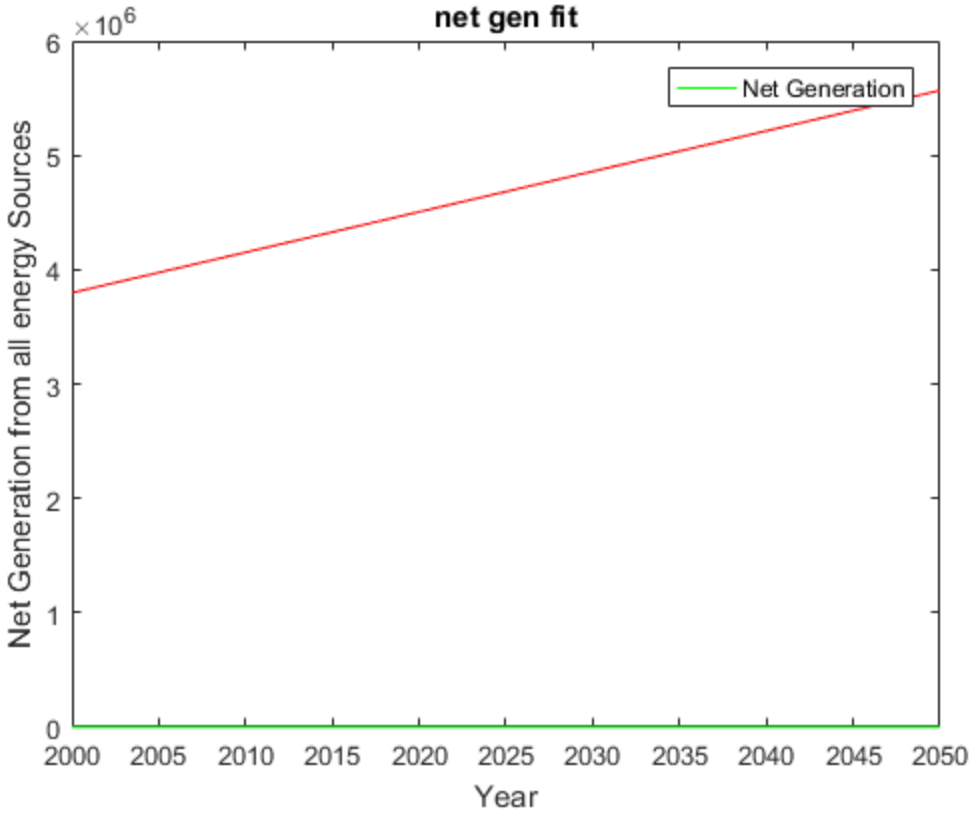
part B and C

```
genFit = fit(years, netGen, 'poly1')

emisFit = fit(years, emissions, 'poly1')

hold on
a1 = plot(genFit, years, netGen ,'g');
M1 = 'Net Generation';

a2 = plot(emisFit, years, emissions ,'b');
M2 = 'CO2 emissions ';

xlabel('Year'),ylabel('Net Generation tmWh(g),Metric tons CO2
 emited(b)'), title('6-36 B')
```

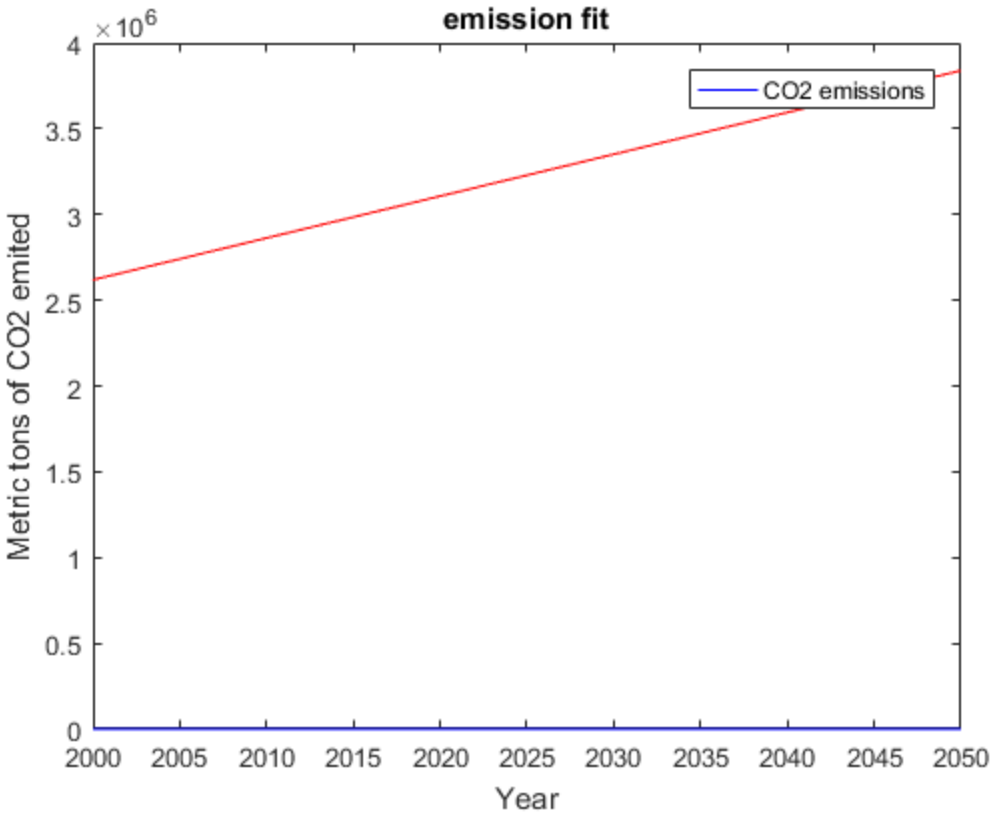
```
legend([a1;a2], [M1;M2]);
snapnow
hold off
clf

fd =ones(1,51) ;
fd=fd';

a3 = plot(genFit,years1,fd ,'g');
legend(a3,M1);
xlabel('Year'),ylabel('Net Generation from all energy
 Sources'),title('net gen fit')
snapnow

clf
a3 = plot(emisFit,years1,fd ,'b');
legend(a3,M2);
xlabel('Year'),ylabel('Metric tons of CO2 emited'),title('emission
 fit')


genFit =

     Linear model Poly1:
     genFit(x) = p1*x + p2
     Coefficients (with 95% confidence bounds):
       p1 =    3.54e+04  (1.743e+04, 5.336e+04)
       p2 =  -6.699e+07  (-1.03e+08, -3.097e+07)

emisFit =

     Linear model Poly1:
     emisFit(x) = p1*x + p2
     Coefficients (with 95% confidence bounds):
       p1 =   2.441e+04  (1.202e+04, 3.68e+04)
       p2 =   -4.62e+07  (-7.104e+07, -2.136e+07)
Warning: Ignoring extra legend entries.
```




```
Warning: Ignoring extra legend entries.
```




```
Warning: Ignoring extra legend entries.
```



Published with MATLAB® R2016b