## **Graph Plot**

# In [1]:

```
import matplotlib.pyplot as plt
import numpy as np
import pandas as pd
```

#### In [2]:

```
gas = pd.read_csv ('gas_prices.csv')
```

### In [3]:

gas

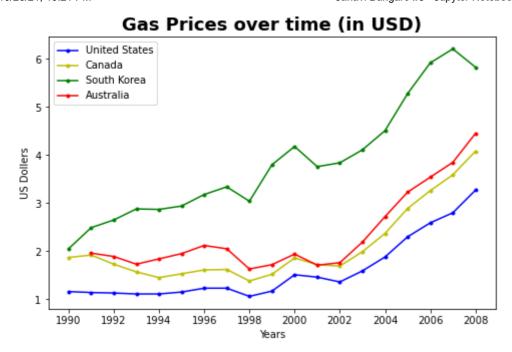
#### Out[3]:

	Year	Australia	Canada	France	Germany	Italy	Japan	Mexico	South Korea	UK	USA
0	1990	NaN	1.87	3.63	2.65	4.59	3.16	1.00	2.05	2.82	1.16
1	1991	1.96	1.92	3.45	2.90	4.50	3.46	1.30	2.49	3.01	1.14
2	1992	1.89	1.73	3.56	3.27	4.53	3.58	1.50	2.65	3.06	1.13
3	1993	1.73	1.57	3.41	3.07	3.68	4.16	1.56	2.88	2.84	1.11
4	1994	1.84	1.45	3.59	3.52	3.70	4.36	1.48	2.87	2.99	1.11
5	1995	1.95	1.53	4.26	3.96	4.00	4.43	1.11	2.94	3.21	1.15
6	1996	2.12	1.61	4.41	3.94	4.39	3.64	1.25	3.18	3.34	1.23
7	1997	2.05	1.62	4.00	3.53	4.07	3.26	1.47	3.34	3.83	1.23
8	1998	1.63	1.38	3.87	3.34	3.84	2.82	1.49	3.04	4.06	1.06
9	1999	1.72	1.52	3.85	3.42	3.87	3.27	1.79	3.80	4.29	1.17
10	2000	1.94	1.86	3.80	3.45	3.77	3.65	2.01	4.18	4.58	1.51
11	2001	1.71	1.72	3.51	3.40	3.57	3.27	2.20	3.76	4.13	1.46
12	2002	1.76	1.69	3.62	3.67	3.74	3.15	2.24	3.84	4.16	1.36
13	2003	2.19	1.99	4.35	4.59	4.53	3.47	2.04	4.11	4.70	1.59
14	2004	2.72	2.37	4.99	5.24	5.29	3.93	2.03	4.51	5.56	1.88
15	2005	3.23	2.89	5.46	5.66	5.74	4.28	2.22	5.28	5.97	2.30
16	2006	3.54	3.26	5.88	6.03	6.10	4.47	2.31	5.92	6.36	2.59
17	2007	3.85	3.59	6.60	6.88	6.73	4.49	2.40	6.21	7.13	2.80
18	2008	4.45	4.08	7.51	7.75	7.63	5.74	2.45	5.83	7.42	3.27

#### In [66]:

```
gas = pd.read_csv ('gas_prices.csv')
plt.figure (figsize = (8,5))
plt.title('Gas Prices over time (in USD)', fontdict= {'fontweight': 'bold', 'fontsize':18})
plt.plot(gas.Year, gas.USA, 'b.-', label =('United States') )
plt.plot(gas.Year, gas.Canada, 'y.-', label=('Canada'))
plt.plot(gas.Year, gas['South Korea'], 'g.-', label=('South Korea'))
plt.plot(gas.Year, gas.Australia, 'r.-', label= ('Australia'))
#countries_to_look_at = ['Australia', 'USA', 'Canada', 'South Korea'
                                                                       7
#for country in gas :
   if country in countries_to_look_at :
        plt.plot(gas.Year, gas[country],Marker='.')
print (gas.Year[::2])
plt.xticks (gas.Year [::2])
plt.xlabel('Years')
plt.ylabel('US Dollers')
plt.legend ()
plt.savefig('Gas_price_fig.png', dpi=300)
plt.show()
      1990
0
```

```
2
      1992
4
      1994
      1996
6
8
      1998
10
      2000
12
      2002
14
      2004
16
      2006
18
      2008
Name: Year, dtype: int64
```



In [ ]: