

```
In [1]: import matplotlib.pyplot as plt
import pandas as pd
import numpy as np
```

```
In [5]: # Load csv
df = pd.read_csv("gas_prices.csv")
df.head()
```

```
Out[5]:
```

	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

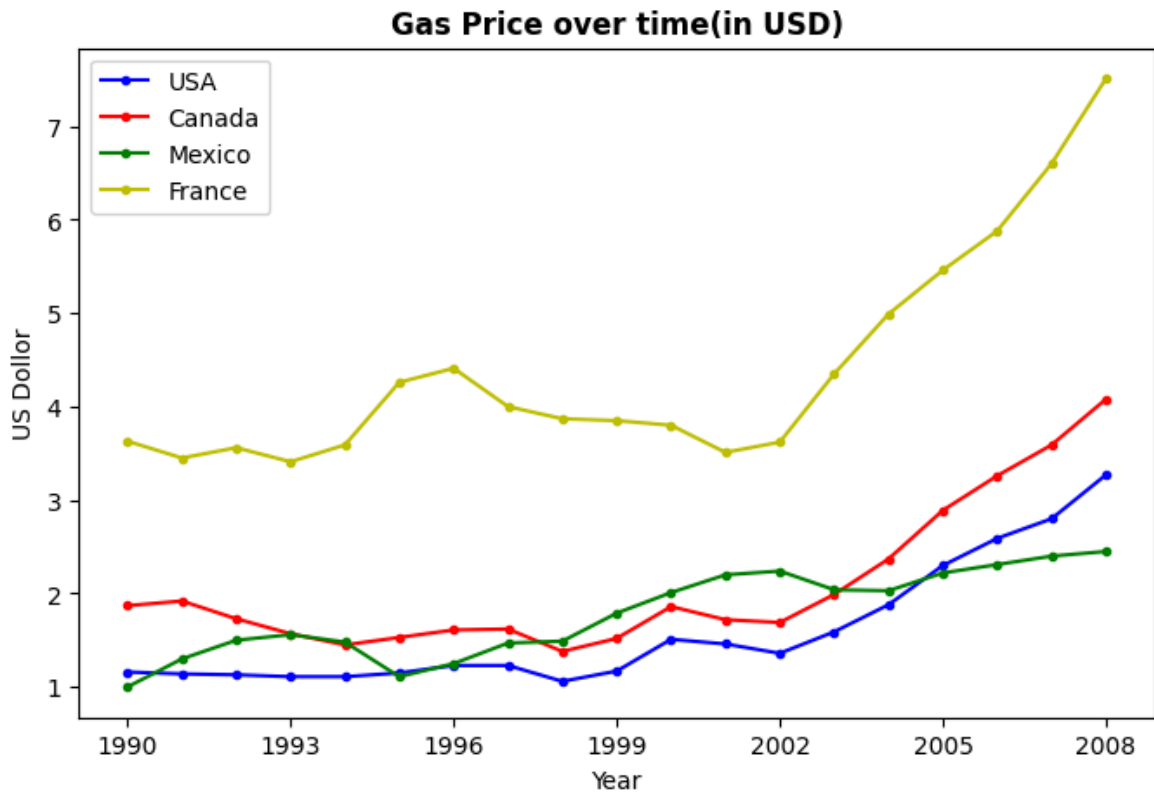


```
In [15]: year = df['Year'].tolist()
```

```
In [16]: year
```

```
Out[16]: [1990,
1991,
1992,
1993,
1994,
1995,
1996,
1997,
1998,
1999,
2000,
2001,
2002,
2003,
2004,
2005,
2006,
2007,
2008]
```

```
In [20]: plt.figure(figsize=(8,5))
plt.title("Gas Price over time(in USD)",fontdict={"fontweight":"bold"})
plt.plot(year,df.USA,'b.-',label="USA")
plt.plot(year,df.Canada,'r.-',label="Canada")
plt.plot(year,df.Mexico,'g.-',label="Mexico")
plt.plot(year,df.France,'y.-',label="France")
plt.xticks(df['Year'][:3].tolist())
plt.xlabel("Year")
plt.ylabel("US Dollor")
plt.legend()
plt.show()
```



```
In [22]: # 2
data = pd.read_csv("iris_data.csv")
data.head()
```

```
Out[22]:
```

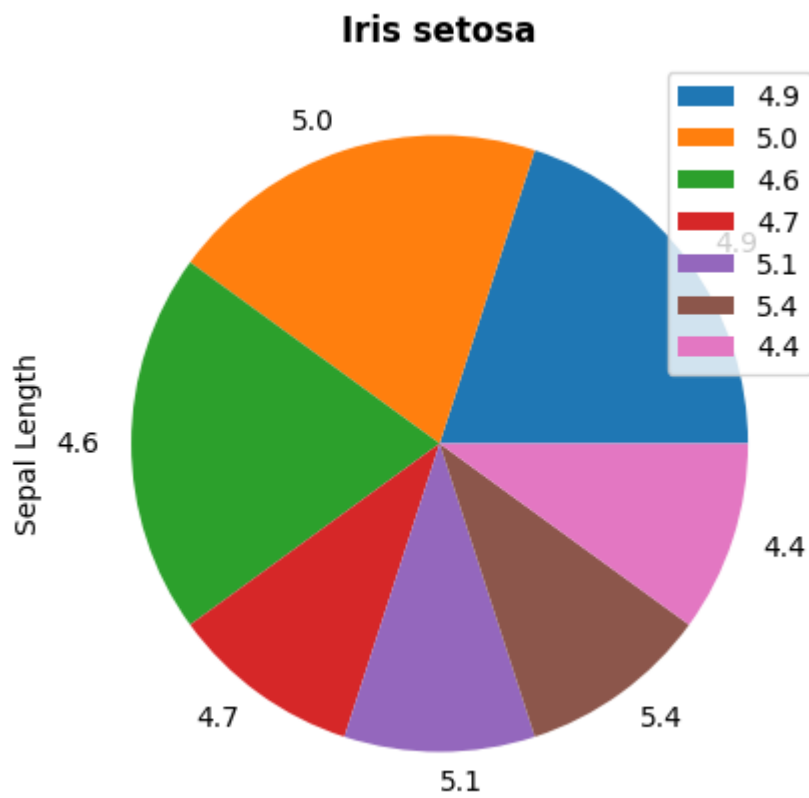
	Id	SepalLengthCm	SepalWidthCm	PetalLengthCm	PetalWidthCm	Species
0	1	5.1	3.5	1.4	0.2	Iris-setosa
1	2	4.9	3.0	1.4	0.2	Iris-setosa
2	3	4.7	3.2	1.3	0.2	Iris-setosa
3	4	4.6	3.1	1.5	0.2	Iris-setosa
4	5	5.0	3.6	1.4	0.2	Iris-setosa

```
In [25]: data["SepalLengthCm"][0:10].value_counts()
```

```
Out[25]: SepalLengthCm
4.9    2
5.0    2
4.6    2
4.7    1
5.1    1
5.4    1
4.4    1
Name: count, dtype: int64
```

```
In [32]: plt.figure(figsize=(8,5))
plt.title("Iris setosa",fontdict={"fontweight":"bold"})
splen = data["SepalLengthCm"][0:10].value_counts()
splen.plot(kind='pie')
# plt.pie(splen)
plt.ylabel("Sepal Length")
```

```
plt.legend()  
plt.show()
```



In []: