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

In [2]:
```
df = pd.read_csv("gas_prices.csv")
```

In [4]:
```
df.head(1)
```

Out[4]:

	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	1.0	2.05	2.82	1.16

In [5]:
```
df.describe()
```

Out[5]:

	Year	Australia	Canada	France	Germany	Italy	Japan	Mexicc
count	19.000000	18.000000	19.000000	19.000000	19.000000	19.000000	19.000000	19.000000
mean	1999.000000	2.348889	2.086842	4.407895	4.224737	4.645789	3.820526	1.781579
std	5.627314	0.845931	0.786618	1.167531	1.425749	1.146610	0.696615	0.462148
min	1990.000000	1.630000	1.380000	3.410000	2.650000	3.570000	2.820000	1.000000
25%	1994.500000	1.780000	1.590000	3.605000	3.370000	3.805000	3.270000	1.475000
50%	1999.000000	1.955000	1.730000	3.870000	3.530000	4.390000	3.640000	1.790000
75%	2003.500000	2.587500	2.180000	4.700000	4.915000	4.940000	4.320000	2.210000
max	2008.000000	4.450000	4.080000	7.510000	7.750000	7.630000	5.740000	2.450000

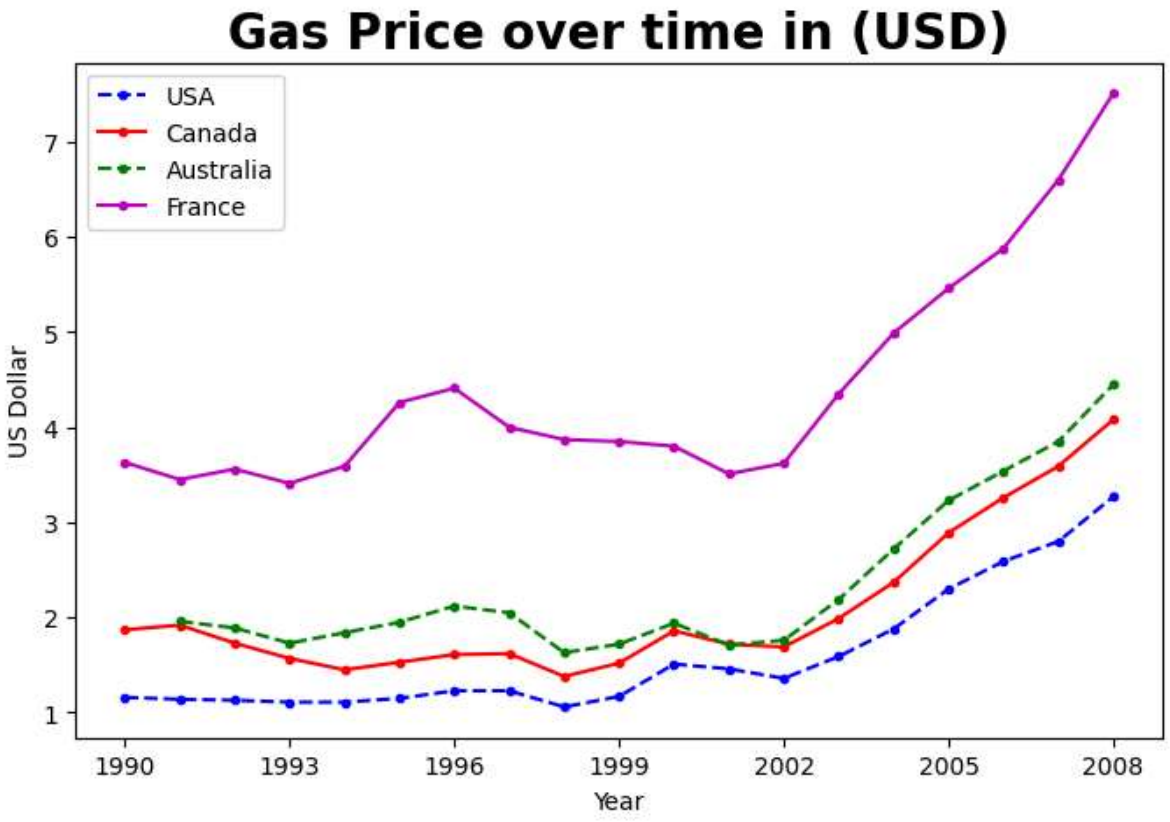
In [9]:
```
df.Year[::4]
```

Out[9]:
```
0     1990
4     1994
8     1998
12    2002
16    2006
Name: Year, dtype: int64
```

In [24]:
```
plt.figure(figsize=(8,5))

plt.title("Gas Price over time in (USD)",fontdict={'fontweight': 'bold','fonts
plt.plot(df.Year,df.USA,'b.--',label='USA')
plt.plot(df.Year,df.Canada,'r.-',label='Canada')
plt.plot(df.Year,df.Australia,'g.--',label='Australia')
plt.plot(df.Year,df.France,'m.-',label='France')

plt.xticks(df.Year[::3].tolist())
plt.xlabel("Year")
plt.ylabel("US Dollar")
plt.legend()
plt.show()
```



In [ ]:
```
# Question -

# 1- show the multiple country comparison using bar chart?
# 2- Using Pie Chart show the total country wise gas consumation?
```

In [25]:
```
fifa = pd.read_csv("fifa_data.csv")
```

In [26]:
```
fifa.head(2)
```

Out[26]:

	Unnamed: 0	ID	Name	Age	Photo	Nationality	
0	0	158023	L. Messi	31	https://cdn.sofifa.org/players/4/19/158023.png	Argentina	https:
1	1	20801	Cristiano Ronaldo	33	https://cdn.sofifa.org/players/4/19/20801.png	Portugal	https:

2 rows × 89 columns

In [30]:
```
fifa.Overall
```

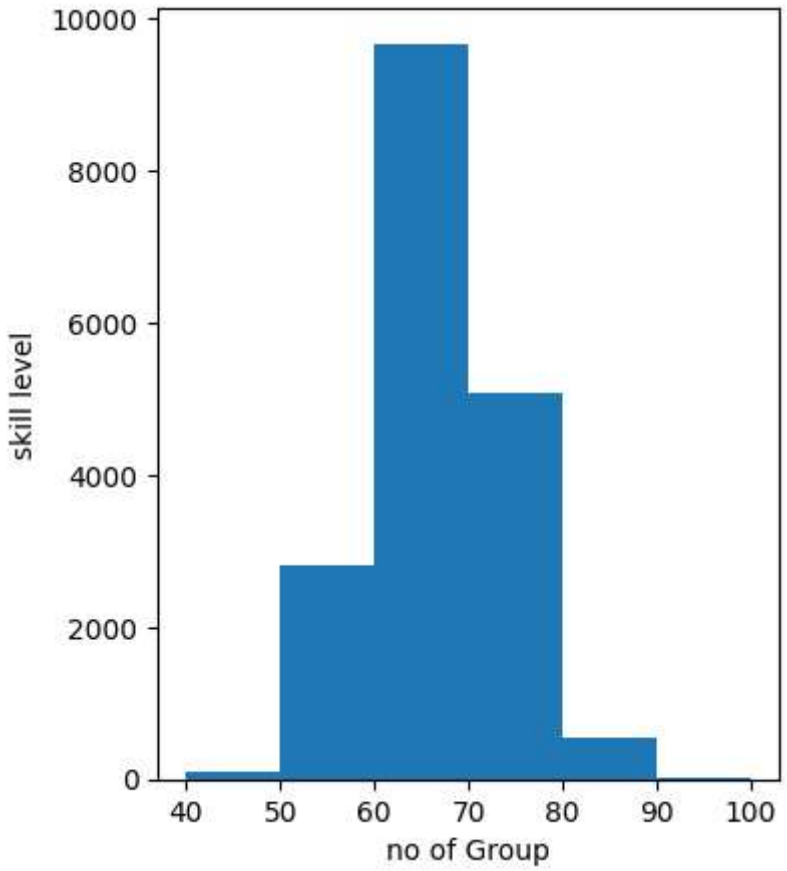
Out[30]:
```
0        94
1        94
2        92
3        91
4        91
        ..
18202    47
18203    47
18204    47
18205    47
18206    46
Name: Overall, Length: 18207, dtype: int64
```

In [ ]:

In [ ]:

In [35]:
```
grp = [40,50,60,70,80,90,100]

plt.figure(figsize=(4,5))
plt.hist(fifa.Overall,grp)
plt.xticks(abc)
plt.xlabel("no of Group")
plt.ylabel("skill level")
plt.show()
```



In [36]:
```
len(fifa)
```

Out[36]: 18207

In [39]:
```
len(fifa.Name)
```

Out[39]: 18207

In [ ]:
```
len(fifa.Name)
```

In [45]:
```
fifa.Name.nunique()
```

Out[45]: 17194

In [ ]:
```
# Question

# print the top five name based on skills in tabular format?
# draw the chart using pie and bar chart?
```

In [46]:
```
data = pd.read_csv("iris_data.csv")
```

In [47]:
```
data.head(5)
```

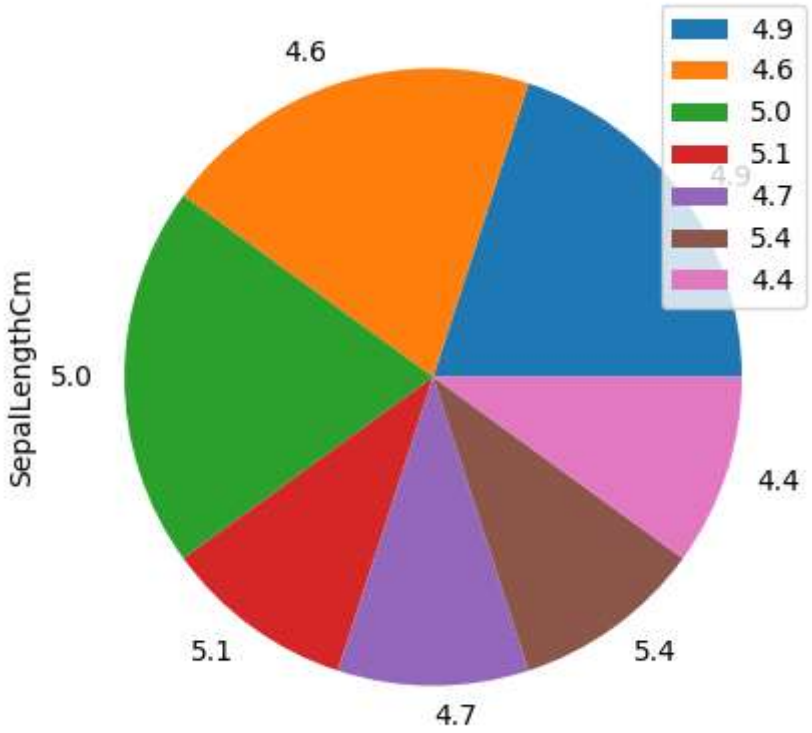
Out[47]:

	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 [52]:
```
SepalLength1 = data.SepalLengthCm[0:10].tolist()
SepalLength1
```

Out[52]:
```
[5.1, 4.9, 4.7, 4.6, 5.0, 5.4, 4.6, 5.0, 4.4, 4.9]
```

In [55]:
```
SepalLength = data.SepalLengthCm[0:10].value_counts()
#SepalLength
plt.figure(figsize=(5,5))
SepalLength.plot(kind='pie') # pandas
# plt.pie(SepalLength) # matplotlib
plt.legend()
plt.show()
```



In [ ]:
```

```