

exp6

March 4, 2022

```
[ ]: import numpy as np
import pandas as pd
from matplotlib import pyplot as plt
import seaborn as sb
```

```
[ ]: df = pd.read_csv("../Toyota.csv", index_col=0, na_values=["??", "???"])
df_copy = df.copy()
df.dropna(axis=0, inplace=True)
df.head()
```

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[ ]: 
```

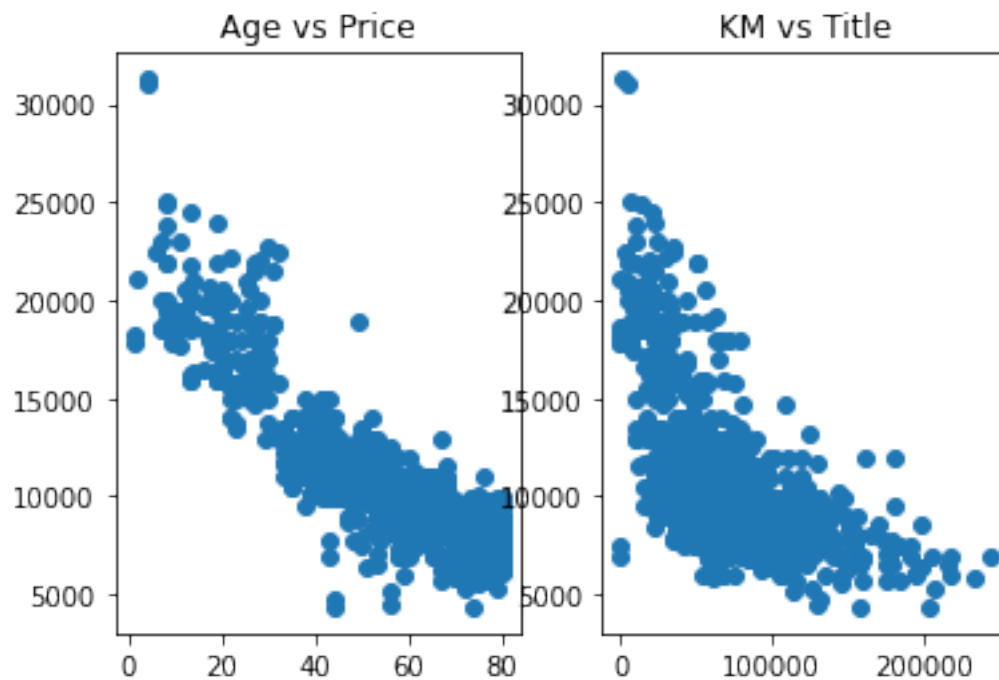
	Price	Age	KM	FuelType	HP	MetColor	Automatic	CC	Doors	Weight
0	13500	23.0	46986.0	Diesel	90	1.0	0	2000	three	1165
1	13750	23.0	72937.0	Diesel	90	1.0	0	2000	3	1165
3	14950	26.0	48000.0	Diesel	90	0.0	0	2000	3	1165
4	13750	30.0	38500.0	Diesel	90	0.0	0	2000	3	1170
5	12950	32.0	61000.0	Diesel	90	0.0	0	2000	3	1170

```
[ ]: # scatterplot

plt.subplot(1,2,1)
plt.scatter(df["Age"],df["Price"])
plt.title("Age vs Price")

plt.subplot(1,2,2)
plt.scatter(df["KM"],df["Price"])
plt.title("KM vs Title")
```

```
[ ]: Text(0.5, 1.0, 'KM vs Title')
```

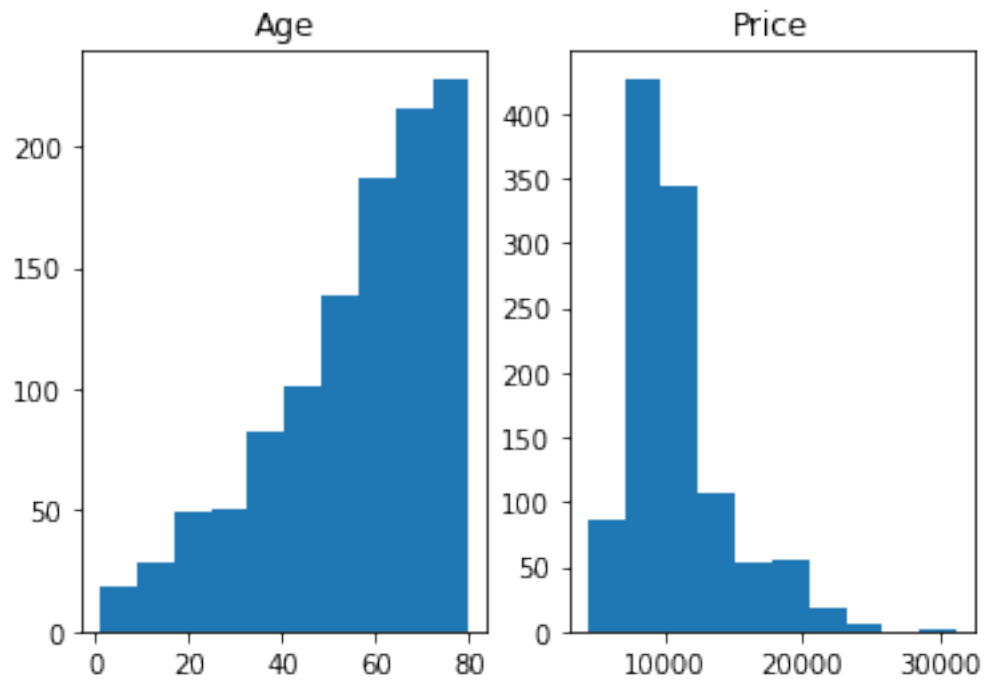


```
[ ]: # histogram

plt.subplot(1,2,1)
plt.hist(df["Age"])
plt.title("Age")

plt.subplot(1,2,2)
plt.hist(df["Price"])
plt.title("Price")

[ ]: Text(0.5, 1.0, 'Price')
```

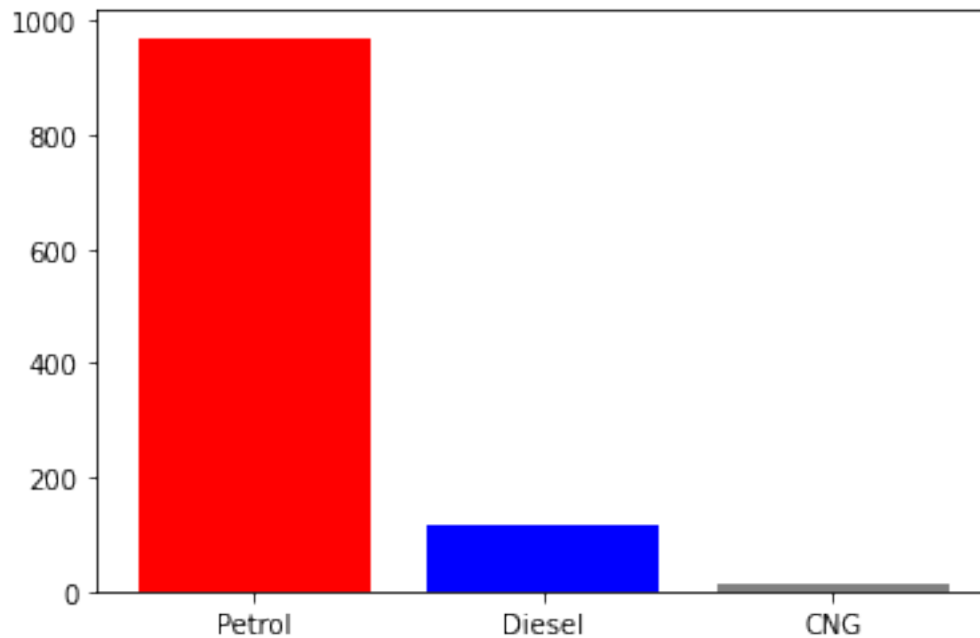


```
[ ]: # bar charts
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count = df["FuelType"].value_counts()  
count = dict(count)
```

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plt.bar(*zip(*count.items()), color = ['red', 'blue', "gray"])
```

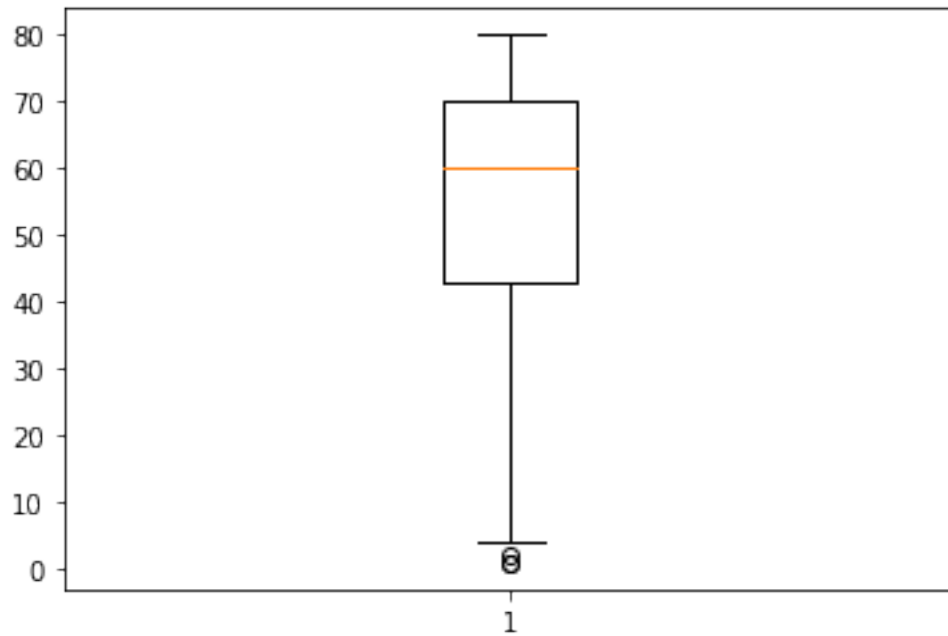
```
[ ]: <BarContainer object of 3 artists>
```



```
[ ]: # box and Whiskers with matplotlib
```

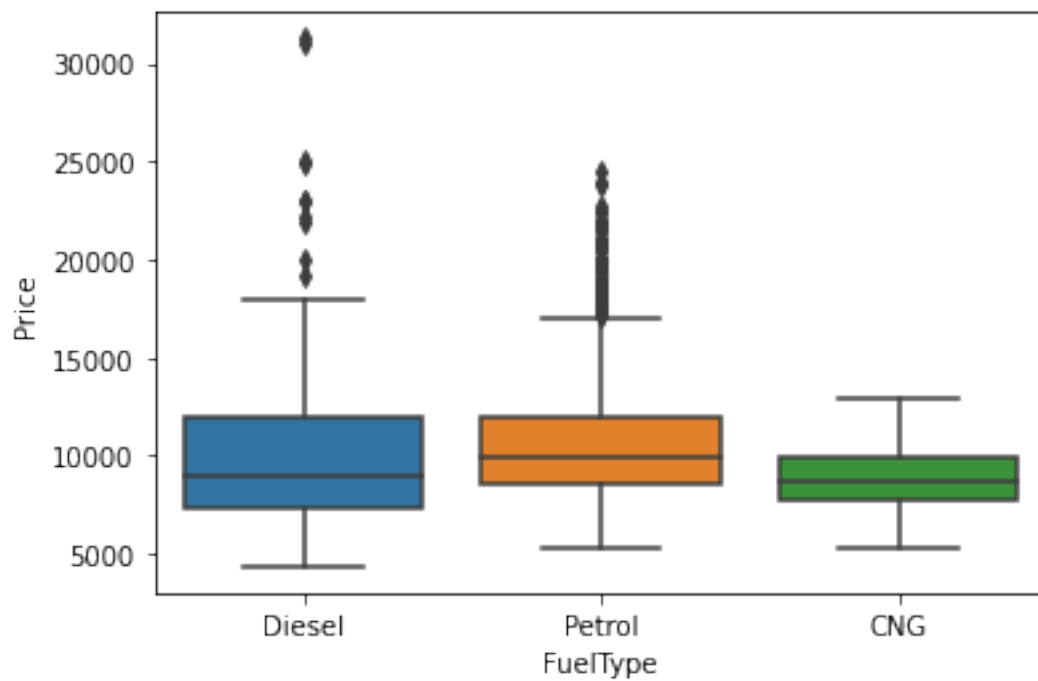
```
plt.boxplot(df["Age"])
```

```
[ ]: {'whiskers': [<matplotlib.lines.Line2D at 0x10c37fa3850>,
<matplotlib.lines.Line2D at 0x10c37fa3b20>],
'caps': [<matplotlib.lines.Line2D at 0x10c37fa3df0>,
<matplotlib.lines.Line2D at 0x10c37fc8100>],
'boxes': [<matplotlib.lines.Line2D at 0x10c37fa24a0>],
'medians': [<matplotlib.lines.Line2D at 0x10c37fc83d0>],
'fliers': [<matplotlib.lines.Line2D at 0x10c37fc86a0>],
'means': []}
```



```
[ ]: # box with whisker in seaborn
sb.boxplot(x=df["FuelType"],y=df["Price"])

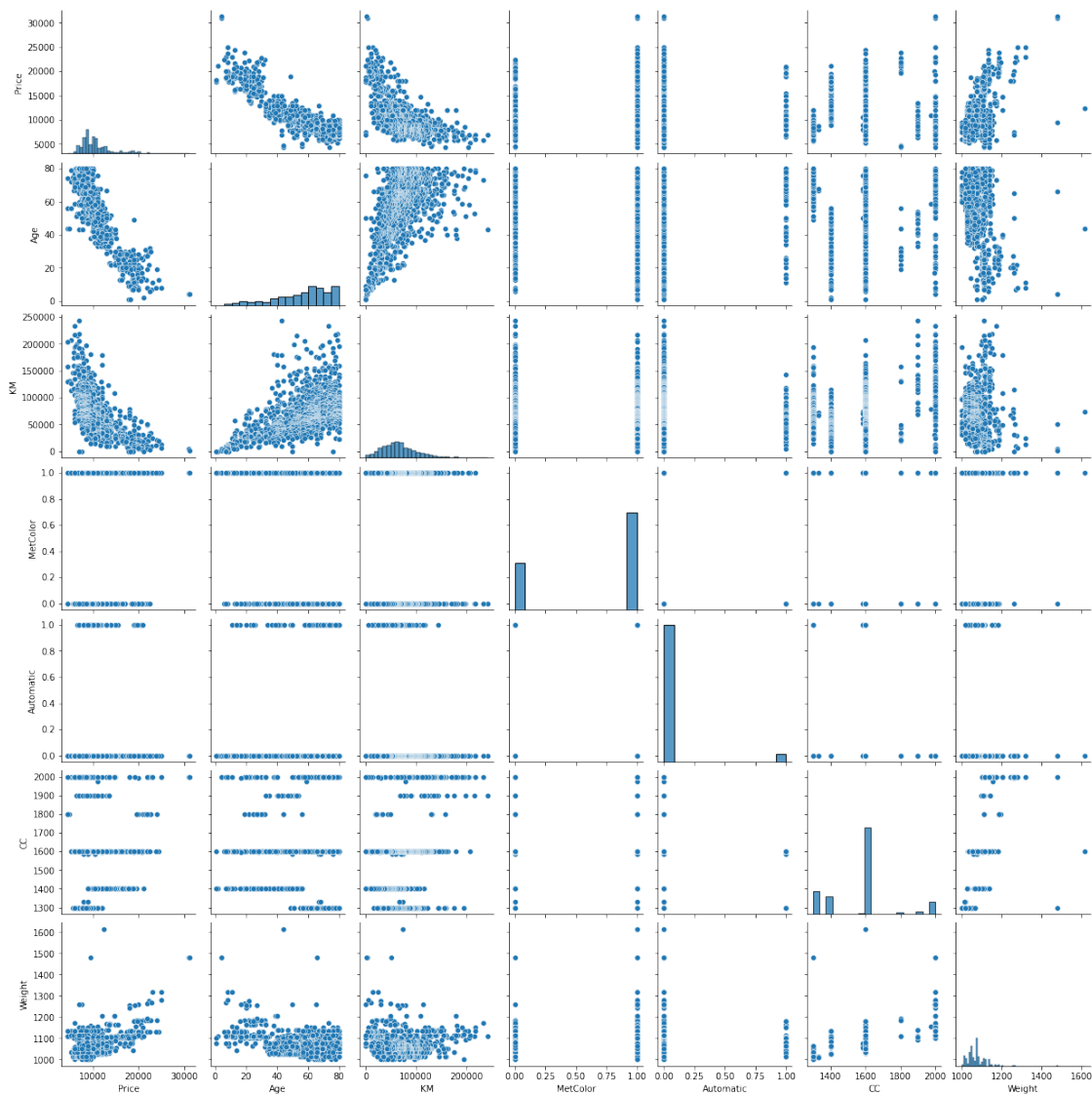
[ ]: <AxesSubplot:xlabel='FuelType', ylabel='Price'>
```



```
[ ]: # pairwise plot
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```
sb.pairplot(df, kind="scatter")
```

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[ ]: <seaborn.axisgrid.PairGrid at 0x10c37744ca0>
```



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[ ]:
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