

Seaborn Analysis

```
In [1]: import pandas as pd
data = { 'Name': [ 'Dazzle' , 'Amal' , 'Elisha' ],
        'Age': [ 19 , 18 , 19 ] }
df = pd.DataFrame( data )
df
```

```
Out[1]:
```

	Name	Age
0	Dazzle	19
1	Amal	18
2	Elisha	19

```
In [6]: import pandas
data = pandas.read_csv("/nba.csv")
data.head()
```

```
Out[6]:
```

	Name	Team	Number	Position	Age	Height	Weight	College	Salary
0	Avery Bradley	Boston Celtics	0.0	PG	25.0	6-2	180.0	Texas	7730337.0
1	Jae Crowder	Boston Celtics	99.0	SF	25.0	6-6	235.0	Marquette	6796117.0
2	John Holland	Boston Celtics	30.0	SG	27.0	6-5	205.0	Boston University	NaN
3	R.J. Hunter	Boston Celtics	28.0	SG	22.0	6-5	185.0	Georgia State	1148640.0
4	Jonas Jerebko	Boston Celtics	8.0	PF	29.0	6-10	231.0	NaN	5000000.0

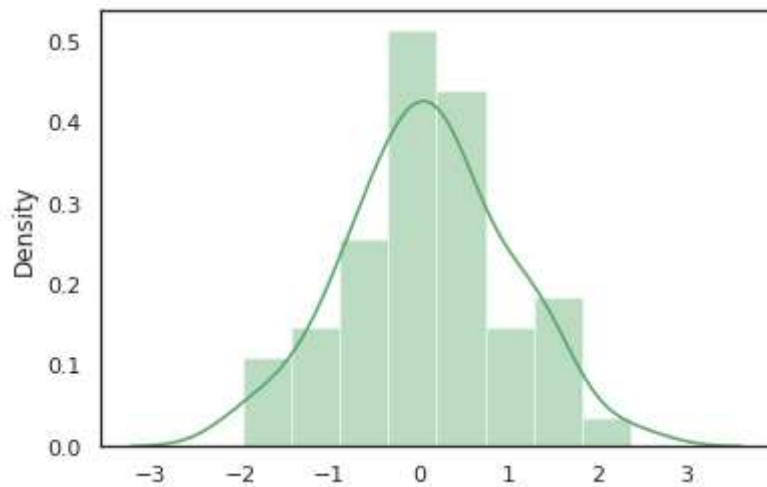
```
In [3]: pip install seaborn
```

```
Looking in indexes: https://pypi.org/simple, (https://pypi.org/simple,) http://us-python.pkg.dev/colab-wheels/public/simple/ (http://us-python.pkg.dev/colab-wheels/public/simple/)
Requirement already satisfied: seaborn in /usr/local/lib/python3.7/dist-packages (0.11.2)
Requirement already satisfied: matplotlib>=2.2 in /usr/local/lib/python3.7/dist-packages (from seaborn) (3.2.2)
Requirement already satisfied: pandas>=0.23 in /usr/local/lib/python3.7/dist-packages (from seaborn) (1.3.5)
Requirement already satisfied: numpy>=1.15 in /usr/local/lib/python3.7/dist-packages (from seaborn) (1.21.6)
Requirement already satisfied: scipy>=1.0 in /usr/local/lib/python3.7/dist-packages (from seaborn) (1.7.3)
Requirement already satisfied: python-dateutil>=2.1 in /usr/local/lib/python3.7/dist-packages (from matplotlib>=2.2->seaborn) (2.8.2)
Requirement already satisfied: kiwisolver>=1.0.1 in /usr/local/lib/python3.7/dist-packages (from matplotlib>=2.2->seaborn) (1.4.4)
Requirement already satisfied: pyparsing!=2.0.4,!=2.1.2,!=2.1.6,>=2.0.1 in /usr/local/lib/python3.7/dist-packages (from matplotlib>=2.2->seaborn) (3.0.9)
Requirement already satisfied: cycler>=0.10 in /usr/local/lib/python3.7/dist-packages (from matplotlib>=2.2->seaborn) (0.11.0)
Requirement already satisfied: typing-extensions in /usr/local/lib/python3.7/dist-packages (from kiwisolver>=1.0.1->matplotlib>=2.2->seaborn) (4.1.1)
Requirement already satisfied: pytz>=2017.3 in /usr/local/lib/python3.7/dist-packages (from pandas>=0.23->seaborn) (2022.5)
Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.7/dist-packages (from python-dateutil>=2.1->matplotlib>=2.2->seaborn) (1.15.0)
```

```
In [4]: import numpy as np
import seaborn as sns
sns.set( style = "white" )
rs = np.random.RandomState( 10 )
d = rs.normal( size = 50 )
sns.distplot(d, kde = True, color = "g")
```

/usr/local/lib/python3.7/dist-packages/seaborn/distributions.py:2619: FutureWarning: `distplot` is a deprecated function and will be removed in a future version. Please adapt your code to use either `displot` (a figure-level function with similar flexibility) or `histplot` (an axes-level function for histograms).
warnings.warn(msg, FutureWarning)

Out[4]: <matplotlib.axes._subplots.AxesSubplot at 0x7fbaa5499e50>



```
In [7]: import seaborn as sns
import pandas

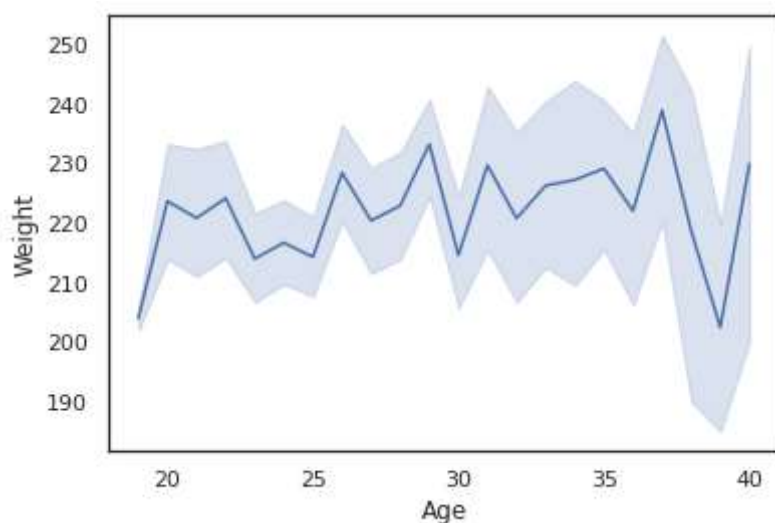
# loading csv
data = pandas.read_csv("/nba.csv")

# plotting lineplot
sns.lineplot( data['Age'], data['Weight'])
```

/usr/local/lib/python3.7/dist-packages/seaborn/_decorators.py:43: FutureWarning: Pass the following variables as keyword args: x, y. From version 0.12, the only valid positional argument will be `data`, and passing other arguments without an explicit keyword will result in an error or misinterpretation.

FutureWarning

Out[7]: <matplotlib.axes._subplots.AxesSubplot at 0x7fbaa45c5fd0>



```
In [8]: import seaborn as sns
import pandas

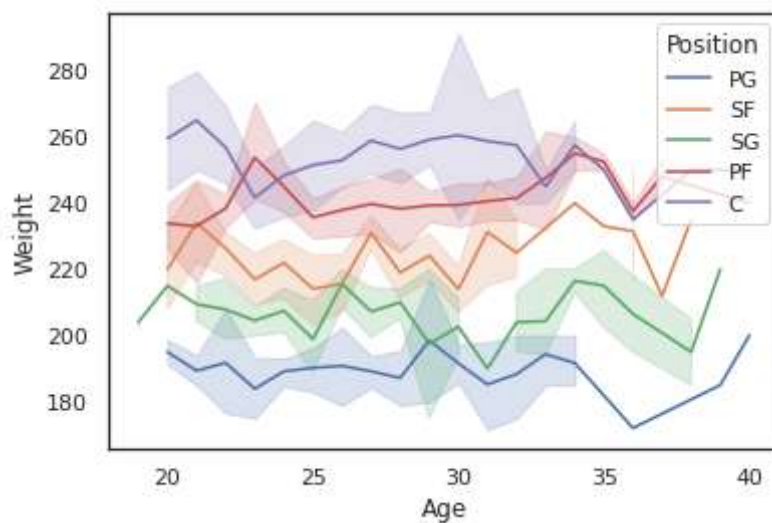
# read the csv data
data = pandas.read_csv("/nba.csv")

# plot
sns.lineplot(data['Age'], data['Weight'], hue = data["Position"])
```

/usr/local/lib/python3.7/dist-packages/seaborn/_decorators.py:43: FutureWarning: Pass the following variables as keyword args: x, y. From version 0.12, the only valid positional argument will be `data`, and passing other arguments without an explicit keyword will result in an error or misinterpretation.

FutureWarning

Out[8]: <matplotlib.axes._subplots.AxesSubplot at 0x7fbaa44ee6d0>



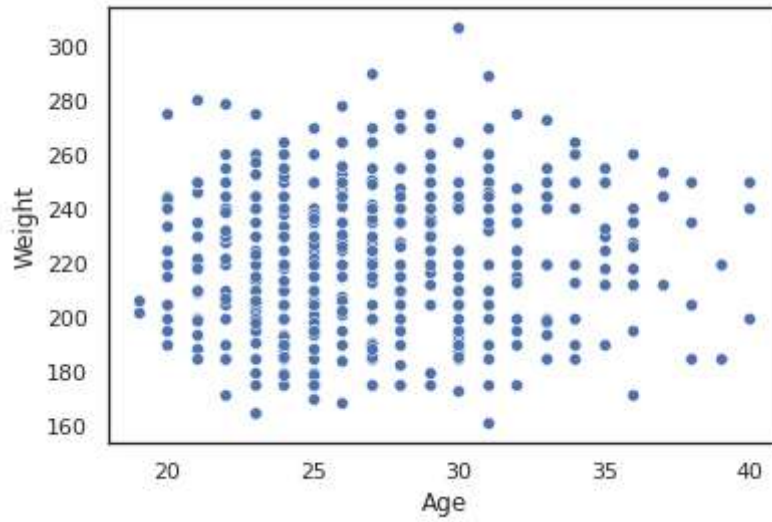
Scatter Plot

```
In [9]: import seaborn
import pandas
data = pandas.read_csv("/nba.csv")
seaborn.scatterplot(data['Age'],data['Weight'])
```

/usr/local/lib/python3.7/dist-packages/seaborn/_decorators.py:43: FutureWarning: Pass the following variables as keyword args: x, y. From version 0.12, the only valid positional argument will be `data`, and passing other arguments without an explicit keyword will result in an error or misinterpretation.

FutureWarning

Out[9]: <matplotlib.axes._subplots.AxesSubplot at 0x7fbaa44321d0>

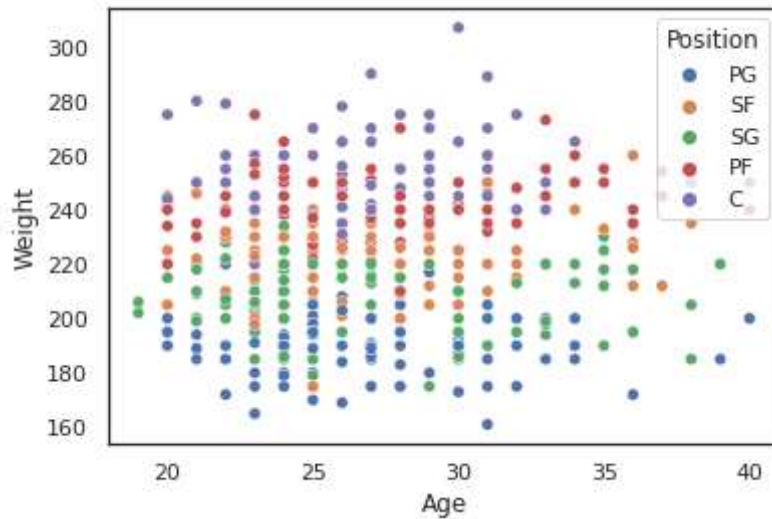


```
In [10]: import seaborn
import pandas
data = pandas.read_csv("/nba.csv")

seaborn.scatterplot( data['Age'], data['Weight'], hue =data["Position"])
```

/usr/local/lib/python3.7/dist-packages/seaborn/_decorators.py:43: FutureWarning: Pass the following variables as keyword args: x, y. From version 0.12, the only valid positional argument will be `data`, and passing other arguments without an explicit keyword will result in an error or misinterpretation.
FutureWarning

Out[10]: <matplotlib.axes._subplots.AxesSubplot at 0x7fbaa2ba3fd0>



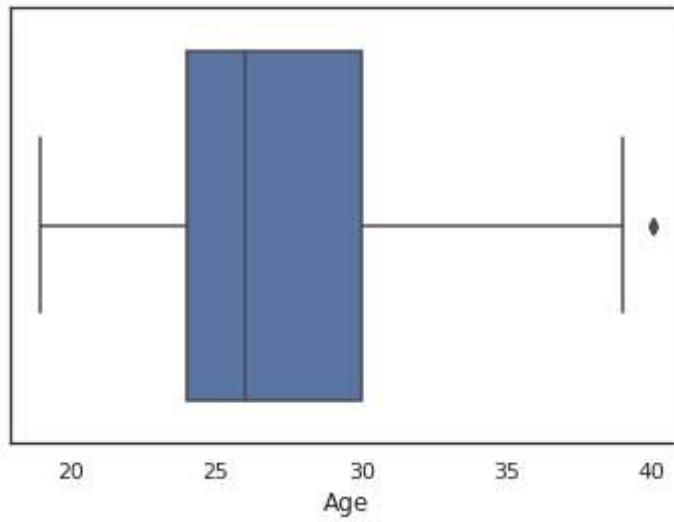
Box plot

```
In [11]: import seaborn as sns
import pandas
data = pandas.read_csv( "/nba.csv" )
sns.boxplot( data['Age'] )
```

/usr/local/lib/python3.7/dist-packages/seaborn/_decorators.py:43: FutureWarning: Pass the following variable as a keyword arg: x. From version 0.12, the only valid positional argument will be `data`, and passing other arguments without a explicit keyword will result in an error or misinterpretation.

FutureWarning

```
Out[11]: <matplotlib.axes._subplots.AxesSubplot at 0x7fbaa444f110>
```

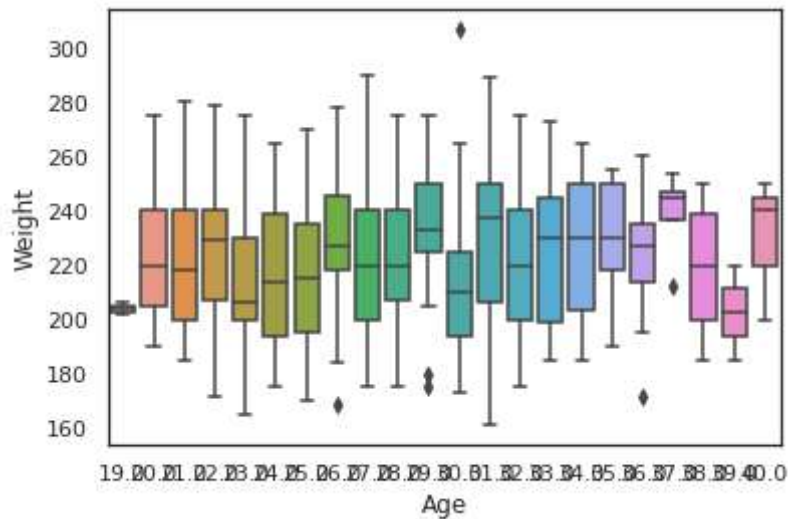



```
In [12]: import seaborn as sns
import pandas
data = pandas.read_csv( "/nba.csv" )
sns.boxplot( data['Age'], data['Weight'])
```

/usr/local/lib/python3.7/dist-packages/seaborn/_decorators.py:43: FutureWarning: Pass the following variables as keyword args: x, y. From version 0.12, the only valid positional argument will be `data`, and passing other arguments without an explicit keyword will result in an error or misinterpretation.

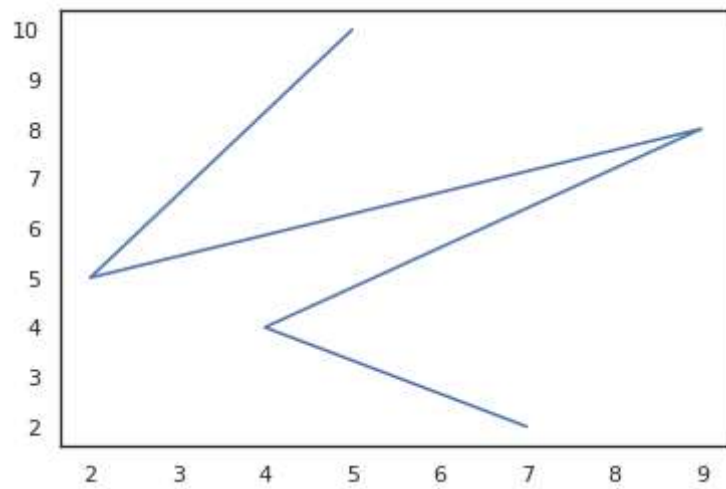
FutureWarning

Out[12]: <matplotlib.axes._subplots.AxesSubplot at 0x7fbaa2b94410>

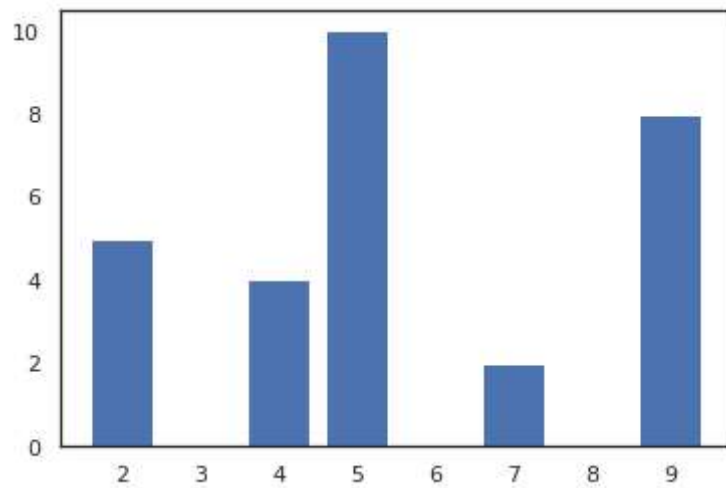


Matplotlib

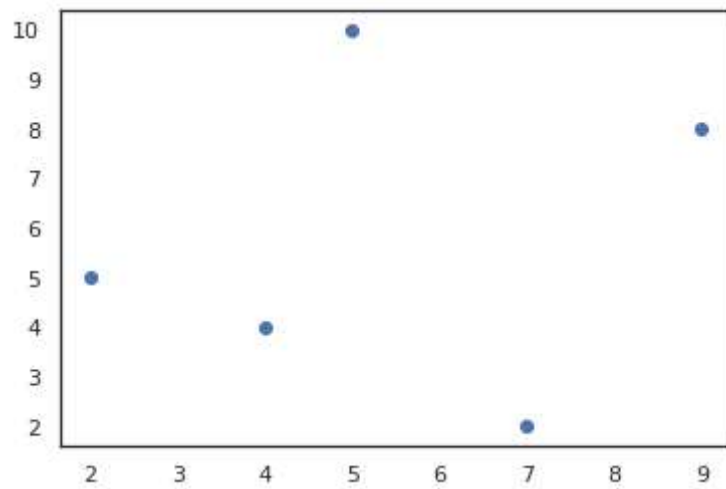
```
In [16]: from matplotlib import pyplot as plt  
x = [5, 2, 9, 4, 7]  
y = [10, 5, 8, 4, 2]  
plt.plot(x,y)  
plt.show()
```



```
In [17]: from matplotlib import pyplot as plt  
x = [5, 2, 9, 4, 7]  
y = [10, 5, 8, 4, 2]  
plt.bar(x,y)  
plt.show()
```



```
In [18]: from matplotlib import pyplot as plt  
x = [5, 2, 9, 4, 7]  
y = [10, 5, 8, 4, 2]  
plt.scatter(x, y)  
plt.show()
```



In []: