Jim Crivello's Module 4 Project - Part 1

Task1 - Series

In [1]:
```
import pandas as pd
```

In [2]:
```
grades = pd.Series([95, 86, 74, 88, 92, 98, 93])
```

In [3]:
```
grades[0]
```

Out[3]:
```
95
```

In [4]:
```
grades.count()
```

Out[4]:
```
7
```

In [5]:
```
grades.mean()
```

Out[5]:
```
89.42857142857143
```

In [6]:
```
grades.min()
```

Out[6]:
```
74
```

In [7]:
```
grades.max()
```

Out[7]:
```
98
```

In [8]:
```
grades.std()
```

Out[8]:
```
7.913219801006895
```

In [9]:
```
grades.describe()
```

Out[9]:
```
count     7.000000
mean     89.428571
std       7.913220
min      74.000000
25%      87.000000
50%      92.000000
75%      94.000000
max      98.000000
dtype: float64
```

Task 2 - Series from Dictionary

In [10]:
```
grades = pd.Series([87, 100, 94], index=['Wally', 'Eva', 'Sam'])
```

In [11]:
```
grades
```

Out[11]:
```
Wally     87
Eva      100
Sam       94
dtype: int64
```

In [12]:
```
grades = pd.Series({'Wally': 87, 'Eva': 100, 'Sam': 94})
```

In [13]:
```
grades
```

Out[13]:
```
Wally     87
Eva      100
Sam       94
dtype: int64
```

In [14]:
```
print("Eva's grade")
```

```
Eva's grade
```

In [15]:
```
grades['Eva']
```

Out[15]:
```
100
```

In [16]:
```
grades.Wally
```

Out[16]:
```
87
```

In [17]:
```
grades.dtype
```

Out[17]:
```
dtype('int64')
```

In [18]:
```
grades.values
```

Out[18]:
```
array([ 87, 100,  94], dtype=int64)
```

Self Check

In [19]:
```
import numpy as np
```

In [20]:
```
import pandas as pd
```

In [21]:
```
temps = np.random.randint(60, 101, 6)
```

In [22]:
```
temperatures = pd.Series(temps)
```

In [23]:
```
temperatures
```

Out[23]:
```
0     94
1    100
2     70
3     80
4     78
5     83
dtype: int32
```

In [24]:
```
temperatures.min()
```

Out[24]:
```
70
```

In [25]:
```
temperatures.max()
```

Out[25]:
```
100
```

In [26]:
```
temperatures.mean()
```

Out[26]:
```
84.16666666666667
```

In [27]:
```
temperatures.describe()
```

Out[27]:
```
count      6.000000
mean      84.166667
std       10.998485
min       70.000000
25%       78.500000
50%       81.500000
75%       91.250000
max      100.000000
dtype: float64
```