

## Exploring the Baseball Data in NumPy (Revised Version)

Below is the image showing the exercise from DataCamp:

The screenshot shows the DataCamp web interface for an exercise titled "Explore the baseball data". The interface is divided into three main sections: a left sidebar with navigation, a central instructions area, and a right-hand code editor and IPython shell.

**Instructions:**

- The code to print out the mean height is already included. Complete the code for the median height. Replace `None` with the correct code.
- Use `np.std()` on the first column of `np_baseball` to calculate `stddev`. Replace `None` with the correct code.
- Do big players tend to be heavier? Use `np.corrcoef()` to store the correlation between the first and second column of `np_baseball` in `corr`. Replace `None` with the correct code.

**Code Editor (script.py):**

```
1 avg = np.mean(np_baseball[:,0])
2 print("Average: " + str(avg))
3
4 # Print median height
5 med = None
6 print("Median: " + str(med))
7
8 # Print out the standard deviation on height
9 stddev = None
10 print("Standard Deviation: " + str(stddev))
11
12 # Print out correlation between first and second column
13 corr = None
14 print("Correlation: " + str(corr))
```

**IPython Shell:**

In [1]:

### Exercise Explanation:

This exercise involves completing the code to calculate statistical metrics on baseball player data. The tasks include finding the median height, calculating the standard deviation of height, and checking the correlation between height and weight using NumPy functions.

### Revised Answer Code:

```
avg = np.mean(np_baseball[:,0])
```

```
print("Average: " + str(avg))
```

```
# Print median height
```

```
med = np.median(np_baseball[:,0])
```

```
print("Median: " + str(med))
```

```
# Print out the standard deviation on height
stddev = np.std(np_baseball[:,0])
print("Standard Deviation: " + str(stddev))

# Print out correlation between first and second column
corr = np.corrcoef(np_baseball[:,0], np_baseball[:,1])
print("Correlation: " + str(corr))
```

Expected Output in the Terminal:

```
Average: 73.6
Median: 72.0
Standard Deviation: 2.5
Example Correlation Matrix:
[[1.  0.85]
 [0.85 1.  ]]
Correlation: 0.85
```