

```
Opening file Boston.csv.
Reading line 1
heading: rm,medv
new length506
Closing file Boston.csv.
Number of records: 506

Stats for rm
The sum of this vector is 3180.03
The mean of this vector is 6.28463
The median of this vector is 6.209
The range of this vector is 3.561 as the minimum value and 8.78 as the maximum value

Stats for medv
The sum of this vector is 11401.6
The mean of this vector is 22.5328
The median of this vector is 21.2
The range of this vector is 5 as the minimum value and 50 as the maximum value

Covariance = The covariance is 0.000843609

Correlation = The correlation is

Program terminated
```

\*my laptop has some problem which keeps tabbing out of windows search bar, in settings, or in file explorer so i couldn't use a snipping tool and had to use my phone camera to take the screenshot hence why it looks a little bad quality

My experience was a little weird since I have some experience with C++ and it wasn't too bad but when trying to formulate data I noticed that there is a lot of nuances related to how you want to set the data up, meaning that unlike R you have to manually create functions to do what you want for this assignment. As R is designed for data I find that their in-built functions would have been much easier, perhaps almost done with the assignment much faster if using them.

Mean describes the average or in mathematical terms the sum of the total divided by the count of the total. Median describes the middle point of sorted data. Range describes the values' minimum and maximum values. This information is crucial to understanding the relationship between data points. If the range is small then it tells us there is not much difference but if the range is enormous then it means there are either outliers or there might not be much relationship. If the range becomes less of a difference after certain conditions or changes are met then we can teach machines to work on making their own changes. Median will help us understand the balance between the values which can also be determined by the range. Machines can use the median as a base for learning. As for mean, it is very important it shows us what the trend is for a data set. Crucial to machine learning is trends which means that there will be "prediction" based on a trend, and through this it can also "learn".