Manipulation of the data read in from a CSV file

February 19, 2019

In [68]:
```
#import statistics Library
import statistics as st

#imports text file as a string

myfile = open("gym.csv","r")
dataIn =myfile.read()

#file is going to be too large to print in Jupyter Notebook
#create a 1D list split by carrage return

instances1D = dataIn.split("\n")

#Create a 2D list
#print(instances1D)

output2D =[]

for instance in instances1D[1:]:
    templist = instance.replace("\"","").split(",")
    print(templist)
    output2D.append(templist)

#basic print of the 2D list
#print(output2D)
print("\n\n")

#print out the list nicely!
for instance in output2D:
    for attribute in instance:
        print(attribute, end="\t")
    print()

#Print out first 4 instances and 3 attributes
for instance in output2D[:4]:
     for attribute in instance[:2]:
        print(attribute, end="\t")
```

```
            print()


        #You can manipulate this 2D list exactly as we did in last weeks lab so to get the av
        weight=[]
        #print(output2D)
        for instance in output2D:
            weight.append(int(instance[3]))

        #Check the contents of the list
        print(weight)

        #get the average weight
        average = st.mean(weight)
        print(average)
```

```
['Jim', '23', 'male', '167', '181']
['Jane', '32', 'female', '150', '160']
['Emma', '46', 'female', '145', '155']
['Kate', '27', 'female', '138', '154']
['Ella', '56', 'female', '129', '162']
['Peter', '80', 'male', '155', '156']
['Paul', '26', 'male', '175', '169']
['Simon', '41', 'male', '149', '157']
['Sinead', '21', 'female', '123', '155']
['Susan', '29', 'female', '155', '165']
```

```
Jim        23        male        167        181
Jane        32        female        150        160
Emma        46        female        145        155
Kate        27        female        138        154
Ella        56        female        129        162
Peter        80        male        155        156
Paul        26        male        175        169
Simon        41        male        149        157
Sinead        21        female        123        155
Susan        29        female        155        165
Jim        23
Jane        32
Emma        46
Kate        27
167
150
145
138
129
```

```
155
175
149
123
155
[167, 150, 145, 138, 129, 155, 175, 149, 123, 155]
148.6
```

In [ ]:

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