

```
In [185]: import pandas as pd
import matplotlib.pyplot as plt
import numpy as np

%matplotlib inline
```

Open File and read the file

```
In [129]: file = "Data4prediction.txt"
f = open(file, "r")
print(f.read())
data = f.read()

"477" 213.37575
"478" 212.415
"479" 215.4135
"480" 212.715
"481" 209.985
"482" 210.69825
"483" 211.485
"484" 211.32375
"485" 211.31175
"486" 210.5985
"487" 209.259
"488" 211.0695
"489" 213.39075
"490" 213.99975
"491" 213.71025
"492" 213.822
"493" 211.91025
"494" 214.242
"495" 212.5665
"496" 212.172
```

Data shape

```
In [187]: da = pd.read_fwf(file, sep=" ", header=None)
          ##print(da)

          display(da)
```

	0
0	"x"
1	"1" 207.29325
2	"2" 207.84
3	"3" 205.962
4	"4" 205.96125
...	...
740	"740" 213.0622
741	"741" 211.6732
742	"742" 214.1535
743	"743" 213.8527
744	"744" 211.2

745 rows × 1 columns

```
In [188]: da[0][500]
```

```
Out[188]: '"500" 213.141'
```

looping through the data

```
In [189]: data_array = [len(da)]
          for i in da:
              data_array.append(da[0].str.split())
              print(da[0].str.split())
```

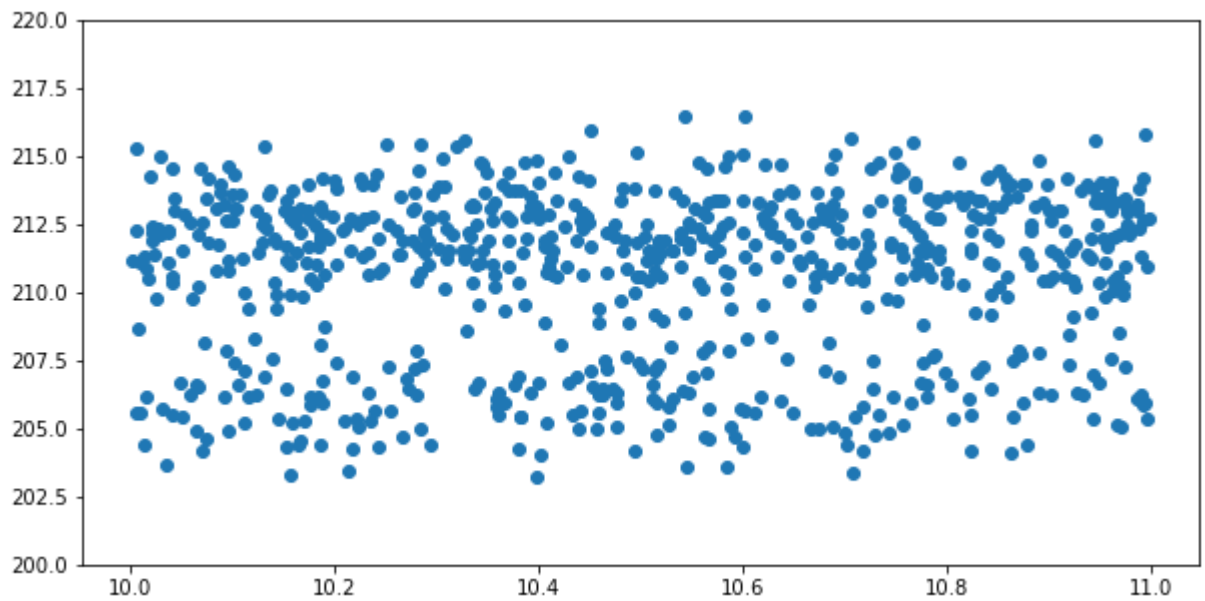
0	["x"]
1	["1", 207.29325]
2	["2", 207.84]
3	["3", 205.962]
4	["4", 205.96125]
...	...
740	["740", 213.0622]
741	["741", 211.6732]
742	["742", 214.1535]
743	["743", 213.8527]
744	["744", 211.2]

Name: 0, Length: 745, dtype: object

```
In [190]: new_data_array = [len(da)]
for i in range(1, len(da)-1):
    j = 0
    for j in range(0, len(data_array[1][i])-1):
        new_data_array.append(data_array[1][i][j+1])
        ##print("Key: {:<3} Value: {:<8}".format(data_array[1][i][j], data_array[1
```

plot the data

```
In [191]: plt.figure(figsize=(10,5))
plt.scatter((np.random.rand(1,len(new_data_array))+10)[0], new_data_array)
plt.ylim(200, 220);
```



In []:

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