

```
1 # === scatterPlotDemo.iypnb ===
2
3 %matplotlib notebook
4 #%%
5 get_ipython().run_line_magic('matplotlib', 'notebook')
6
7
8 #%%
9 # -----
10 # Scatter plots demands the simplest set of methods of all the charts so far.
11 # Simply take in two sets of data and pass them into `plt.scatter()`.
12 # -----
13
14
15 #%%
16 # Import Dependencies
17 import random
18 import matplotlib.pyplot as plt
19 import numpy as np
20
21
22 #%%
23 # -----
24 # This particular plot uses random data just so the class can avoid cluttering
25 # the example with Pandas cleanup – we will see more realistic context later
26 # -----
27
28 # The maximum x value for our chart will be 100
29 x_limit = 100
30
31 # List of values from 0 to 100 each value being 1 greater than the last
32 x_axis = np.arange(0, x_limit, 1)
33
34 # Create a random array of data that we will use for our y values
35 data = [random.random() for value in x_axis]
36
37
38 #%%
39 # -----
40 # the fact that the code can change the size of each dot by passing the `s=<LIST>`
41 # parameter. In this case, the values stored within `x_axis` will determine
42 # the size of a dot.
43 # -----
44
45 # Tells matplotlib that we want to make a scatter plot. The size of each
46 # point on our plot is determined by their x value
47
48 plt.scatter(x_axis, data, marker="o", facecolors="red", edgecolors="black",
49             s=x_axis, alpha=0.75)
50
51
52 #%%
53 # The y limits of our scatter plot is 0 to 1
54 plt.ylim(0, 1)
55
```

```
56
57 #%%
58 # The x limits of our scatter plot is 0 to 100
59 plt.xlim(0, x_limit)
60
61
62 #%%
63 # Prints the scatter plot to the screen
64 plt.show()
65
66
67 #%%
68
69
70
71
```