

Scatterplot for iris data set

```
In [1]: from bokeh.sampledata.iris import flowers
```

```
In [2]: flowers
```

```
Out[2]:
```

	sepal_length	sepal_width	petal_length	petal_width	species
0	5.1	3.5	1.4	0.2	setosa
1	4.9	3.0	1.4	0.2	setosa
2	4.7	3.2	1.3	0.2	setosa
3	4.6	3.1	1.5	0.2	setosa
4	5.0	3.6	1.4	0.2	setosa
5	5.4	3.9	1.7	0.4	setosa

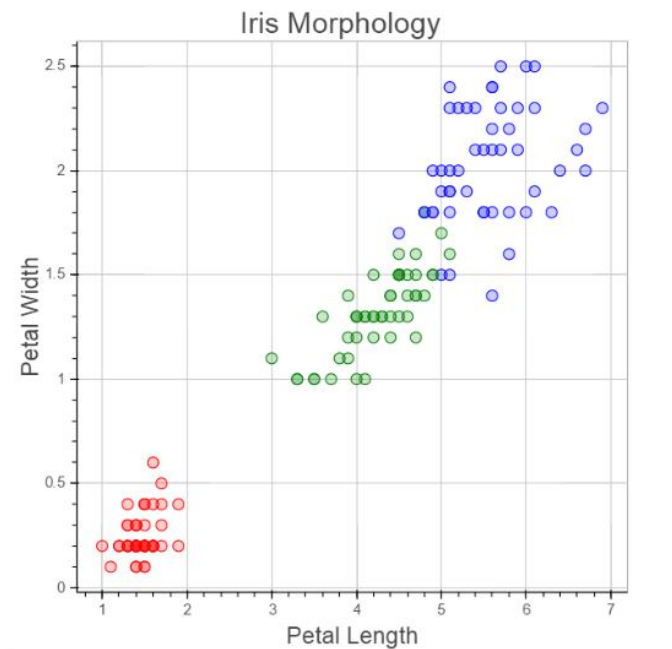
```
from bokeh.sampledata.iris import flowers
from bokeh.plotting import figure, show, output_file

colormap = {'setosa': 'red',
            'versicolor': 'green',
            'virginica': 'blue'}
flowers['color'] =
    flowers['species'].map(lambda x: colormap[x])

output_file("iris.html",
            title="iris.py example")

p = figure(title = "Iris Morphology")
p.xaxis.axis_label = 'Petal Length'
p.yaxis.axis_label = 'Petal Width'

p.circle(flowers["petal_length"],
          flowers["petal_width"],
          color=flowers["color"],
          fill_alpha=0.2, size=10, )
show(p)
```



Exercises

- Try this plot out for different combinations of predictors variables.
- Try out some different colour combinations for the `colormap`.
- Try this out with a different data set : `autompg`. (*See the graphic below.*) You can use `cyl` and `origin` as grouping variables.
 - * The levels of `cyl` are 4,6 and 8.
 - * The levels of `origin` are 1,2 and 3.

```
In [6]: from bokeh.sampledata.autompg import autompg
```

```
In [7]: autompg
```

Out[7]:

	mpg	cyl	displ	hp	weight	accel	yr	origin	name
0	18	8	307	130	3504	12.0	70	1	chevrolet chevelle malibu
1	15	8	350	165	3693	11.5	70	1	buick skylark 320
2	18	8	318	150	3436	11.0	70	1	plymouth satellite
3	16	8	304	150	3433	12.0	70	1	amc rebel sst
4	17	8	302	140	3449	10.5	70	1	ford torino
5	15	8	429	198	4341	10.0	70	1	ford galaxie 500