Adding Graphics to our PDFs

Up to now, we've generated a report with a title and a table of data. Next let's add something a little more graphical. What could be better than a fruit pie (graph)?! We're going to need to use the <u>Drawing</u> Flowable class to create a <u>Pie</u> chart.

```
1  >>> from reportlab.graphics.shapes import Drawing
2  >>> from reportlab.graphics.charts.piecharts import Pie
3  >>> report_pie = Pie(width=3*inch, height=3*inch)
```

To add data to our **Pie** chart, we need two separate lists: One for data, and one for labels. Once more, we're going to have to transform our fruit dictionary into a different shape. For an added twist, let's sort the fruit in alphabetical order:

```
1
     >>> report_pie.data = []
 2
     >>> report_pie.labels = []
     >>> for fruit name in sorted(fruit):
 4
           report_pie.data.append(fruit[fruit_name])
 5
           report pie.labels.append(fruit name)
 6
 7
     >>> print(report_pie.data)
     [2, 5, 8, 3, 1, 1, 13]
9
     >>> print(report_pie.labels)
     ['apples', 'bananas', 'cherries', 'durians', 'elderberries', 'figs', 'grapes']
10
```

The Pie object isn't Flowable, but it can be placed inside of a Flowable Drawing.

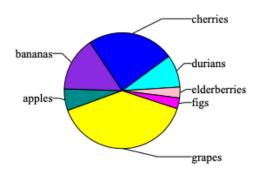
```
1 >>> report_chart = Drawing()
2 >>> report_chart.add(report_pie)
```

Now, we'll add the new Drawing to the report, and see what it looks like.

```
1 report.build([report_title, report_table, report_chart])
```

A Complete Inventory of My Fruit

elderberries	1
figs	1
apples	2
durians	3
bananas	5
cherries	8
grapes	13



Alright, and with that, you've seen a few examples of what we can do with the ReportLab library. There's a ton more things that can be done that we won't cover here. You'll want to refer to the ReportLab User Guide for more details on the features we've seen, and to see what else you can create with it.

By the way, the ReportLab User Guide is a PDF that is generated using reportlab! Cool, right?