

- Sending Emails from Python

Generating PDFs from Python

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Reading: Introduction to Generating PDFs

10 min

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Reading: Adding Tables to our PDFs

10 min

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Reading: Adding Graphics to our PDFs

10 min
- Module 3 Project

# 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 *Drawing* Flowable class to create a *Pie* 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:

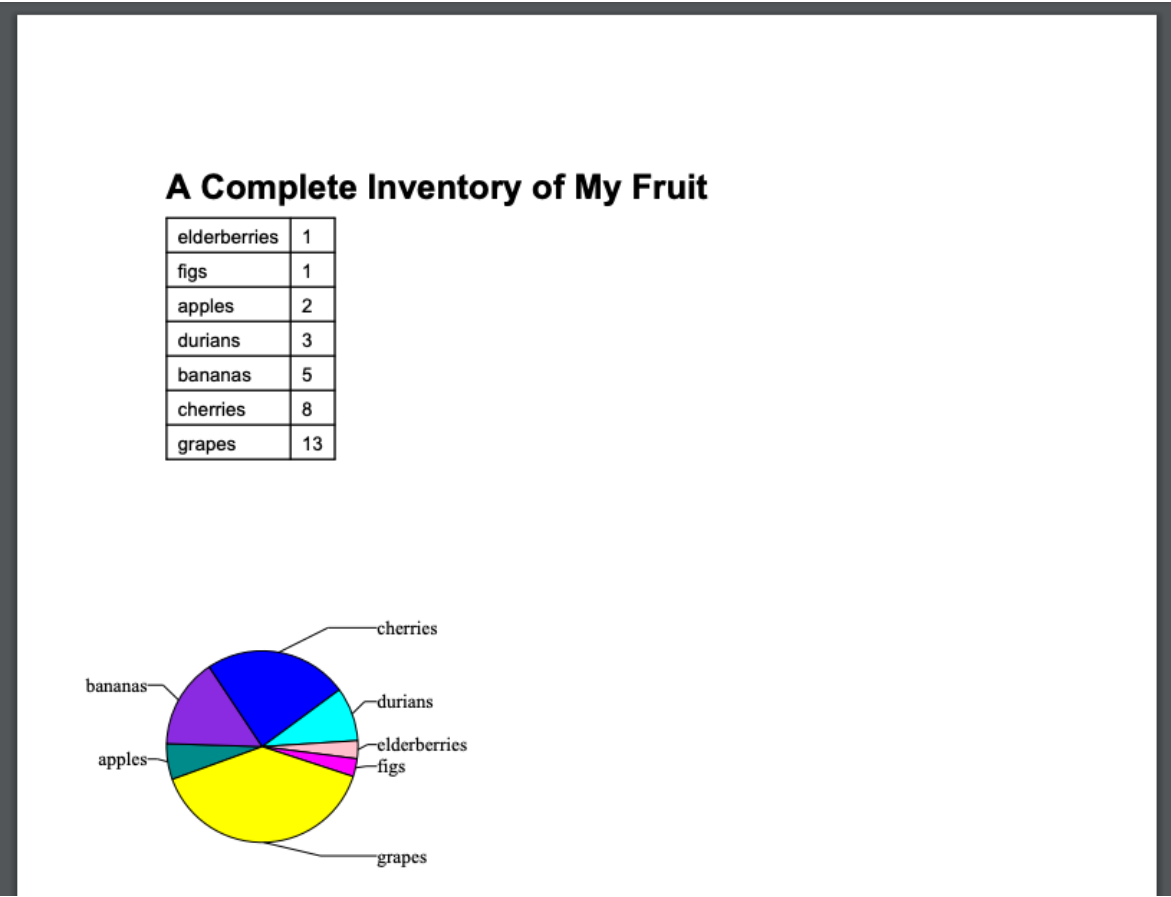
```
1  >>> report_pie.data = []
2  >>> report_pie.labels = []
3  >>> for fruit_name in sorted(fruit):
4  ...     report_pie.data.append(fruit[fruit_name])
5  ...     report_pie.labels.append(fruit_name)
6  ...
7  >>> print(report_pie.data)
8  [2, 5, 8, 3, 1, 1, 13]
9  >>> print(report_pie.labels)
10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

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])
```



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?