Subfigures and Subtables

Name of the student

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List of Figures

| $\frac{1}{2}$ | Multiple subfigures inside a figure | |
|-----------------|---|---|
| \mathbf{List} | of Tables | |
| 1 | Max and Min temperatures recorded in the first two weeks of | 0 |
| | December | 2 |
| 2 | Student Database | 3 |
| | | |

1 Subfigures

When writing a project report or thesis, we may want to include some slightly more complicated figures with multiple images. We can do this using subfigure environments inside a figure environment. Before we can do this though, we need to load up the caption and subcaption packages: \usepackage{caption} and \usepackage{subcaption}. Here's an example, as shown in Figure 1.

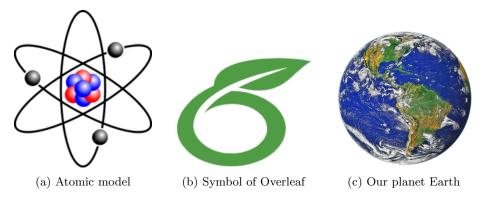


Figure 1: Multiple subfigures inside a figure

To start with, we create a new figure, center it and then create a new sub-figure. In the subfigure command, we need to add a placement specifier and then give it a width. Because we want three images next to each other, we set a width of 0.3 times the value of \textwidth. We need to make sure that the sum of the widths we specify for the subfigures is less than the text width if we want them all on the same line. When we add the image, we need to specify the width using width= followed by the \textwidth command. To add some spacing between the figures, we'll use the \hfill command.

2 Subtables

Just like with images, we may want to group tables into a single table environment. It can be done by using subtable environments inside a table environment. Here's an example, as shown in Table 1. Notice that in each \begin{subtable} subtable} command, we have included a position specifier and a width. Again, we can give each subtable a label and caption, as well as give the whole table a label and caption.

| Day | Max Temp | Min Temp |
|-----|----------|----------|
| Mon | 20 | 13 |
| Tue | 22 | 14 |
| Wed | 23 | 12 |
| Thu | 25 | 13 |
| Fri | 18 | 7 |
| Sat | 15 | 13 |
| Sun | 20 | 13 |

(a) First Week

| Day | Max Temp | Min Temp |
|-----|----------|----------|
| Mon | 17 | 11 |
| Tue | 16 | 10 |
| Wed | 14 | 8 |
| Thu | 12 | 5 |
| Fri | 15 | 7 |
| Sat | 16 | 12 |
| Sun | 15 | 9 |

(b) Second Week

Table 1: Max and Min temperatures recorded in the first two weeks of December

3 List of Figures

To create a list of figures, use the \listoffigures command. The caption of each figure will be used to generate this list.

4 List of Tables

To create a list of tables, use the \listoftables command. The caption of each table will be used to generate this list.

5 Table and figure side by side with minipages

| Student | Hours/week | Grade |
|------------------|------------|-------|
| Ada Lovelace | 2 | A |
| Linus Thorvalds | 8 | A |
| Bruce Willis | 12 | F |
| Richard Stallman | 10 | В |
| Grace Hopper | 12 | A |
| Alan Turing | 8 | С |
| Bill Gates | 6 | D |
| Steve Jobs | 4 | Е |

Table 2: Student Database

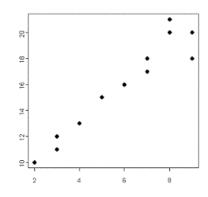


Figure 2: 2-D scatterplot of the Student Database