

# 1 Introduction

Many things in  $\text{\LaTeX}$  can be referenced, such as sections, subsections, sub-subsections, tables, figures, individual items in a list, equations etc. The commands used are the same, no matter what you are referencing. These are:

`\label{marker}` - this is used to mark the thing you are referencing

`\ref{marker}` - this returns the reference to the thing you are marking

`\pageref{marker}` - this returns the page number of the thing you are marking

## 1.1 Conventions

It is common among  $\text{\LaTeX}$  users to start the marker with a few specific letters to indicate what it is they are referencing. E.g. an example marker for a figure would be `fig:exampleImage`, but for a section, it would be `sec:exampleSection`. Table 1 outlines the convention used:

<b>ch:</b>	chapter
<b>sec:</b>	section
<b>subsec:</b>	subsection
<b>fig:</b>	figure
<b>tab:</b>	table
<b>eq:</b>	equation
<b>lst:</b>	code listing
<b>itm:</b>	enumerated list item
<b>alg:</b>	algorithm
<b>app:</b>	appendix subsection

Table 1: Conventions used

# 2 Examples

## 2.1 Figures

To reference a picture, add the `\label` command *after* the caption line:



Figure 1: The K2 mountain in Baltistan

Figure 1 on page 2 shows a picture of the K2 mountain.

## 2.2 Sections

We can also reference a subsection by placing a `\label` command right after the subsection line, e.g. we talked about conventions in section 1.1 on page 1.

## 2.3 Lists

1. Dog
  - (a) Labrador
    - i. English Labrador
    - ii. American Labrador
  - (b) Alsation
  - (c) Pug
2. Cat

- Persian
- British shorthair
- Siamese
- Bengal

As we can see from item 1(a)i, the English Labrador is a type of dog.

Also, as we can see from item 2, there is a type of cat which is called a Persian cat.

### 3 Final warning

Often in  $\text{\LaTeX}$ , you need to compile a document more than once for it to compile properly. If you put in new references, then compile your document, you will come up with a warning such as:

Reference ‘itm:englishLab’ on page 3 undefined on input line 82.

Just compile the document again, and the warning should go away. If it doesn’t, make sure you have written the reference down correctly and that the `\label` command is there. In the case of figures and tables, ensure that the `\label` command is after the `\caption` command.