

# 1 Introduction

This example shows what you can do with a one line `header.tex` file.

## 1.1 subsection

This text is a inside subsection. You can refer to other sections, like section ??.

# 2 some code

Even if you specify the programming language, code syntax is not highlighted by default.

```
1  int main()
2  {
3      printf("hello world\n");
```

In line 3 you print `hello world` to `stdout`.

```
4      int a = 1 + 2;
5  }
```

In line 4 you just do an assignment.

See <https://orgmode.org/manual/Literal-Examples.html> literal examples documentation if you want explanation about this stuff.

In my experience underscore does not work with code references. For example `print_c` will not work in this case.

## 2.1 python code

```
# This program prints Hello, world!
print('Hello, world!')
```

# 3 lists

## 3.1 numerated

1. one
2. two

- (a) sub-two
  - i. sub-sub-two
- 3. three

### 3.2 unnumbered

- One
  - Two
    - \* Three
      - Four

#### 3.2.1 trivia

Doc-org could mean a lot of things, such as:

- document - organized
- docker - org mode
- docile - organist

A team of 42 linguists is currently searching for the answer.

## 4 Some math

You can insert latex equation, like equation ??.

$$\phi = \frac{2\pi f D}{c} \tag{1}$$

As you can see, reference to equations works by default, but see **references** example if you want links to be clickable.

### 4.1 Other latex equations

Equation ?? reference.

$$D = \frac{c\phi}{2\pi f} \tag{2}$$

#### 4.1.1 A more complicated equation

$$\Delta TOF_{est} = \frac{k_T TOF}{1 + k_T} - 0.5 \frac{\mu'_A - \mu'_T}{1 + k_T}. \tag{3}$$