

Template

HS21 ETHZ

November 7, 2021

1 Section Title

you can define a label like this

1.1 subsection title

you can define references to labels like this: 1, 1.1

1.1.1 subsubsection title

this is just normal text

leave an empty line in the source to make a new paragraph or \\

or a \newline command for a manual linebreak

however, do not make a manual newline at the end of a paragraph, as this generates hbox underflow badness

this is text without automatic linebreak

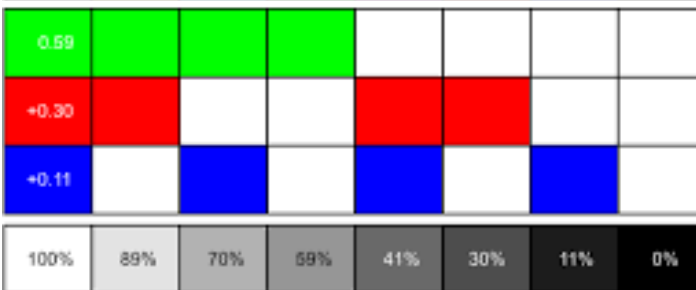
if to long, text{...} can generate overfull badness

this is bold text

this is italic text

AND THIS TEXT IS IN ALL CAPS

2 Picture Template



3 Math Templates

3.1 example

Beispiele

- $\Omega = \{\frac{1}{n} \mid n \in \mathbb{N}\}$
 $\sup(\Omega) = 1$ $\inf(\Omega) = 0$
- $[a, b]$, (a, b) , $(a, b]$ und (a, b) mit $a < b$
 a ist jeweils das Infimum und b das Supremum

3.2 annotation

Zu zeigen:

- $a_n \geq 0$
- $\lim_{n \rightarrow \infty} a_n = 0$
- $a_{n+1} - a_n \leq 0$ oder $\frac{a_{n+1}}{a_n} \leq 1$

3.3 equation numbered

$$Q = \lim_{n \rightarrow \infty} \left| \frac{a_{n+1}}{a_n} \right| \quad \sum_{n=0}^{\infty} a_n \begin{cases} \text{divergiert} & Q > 1 \\ \text{konvergiert absolut} & Q < 1 \\ \text{keine Aussage} & Q = 1 \end{cases} \quad (1)$$

3.3.1 equation unnumbered

$$Q = \lim_{n \rightarrow \infty} \left| \frac{a_{n+1}}{a_n} \right| \quad \sum_{n=0}^{\infty} a_n \begin{cases} \text{divergiert} & Q > 1 \\ \text{konvergiert absolut} & Q < 1 \\ \text{keine Aussage} & Q = 1 \dots \end{cases}$$

equation can also easily generate overfull badness

4 Code Template

4.1 tiny c++ code from source text, made to look approximately like codeexpert

```
#include <iostream>
int main(){
    std::cout <<"Hello_World" <<std::endl;
    for(int i =0; i<10; ++i){
        if(!(i%2)) std::cout <<i <<"_is_even" <<'\n';
    }
}
/* this is a comment */
// this is also a comment
```

4.2 code in normal text size

```
// code
std::cout <<"hello" <<'\n';
```

4.3 code in Huge text size

```
// code
```

4.4 code from file

```
#include <iostream>
int main (){
    std::cout <<"Hello_World!" <<'\n';
    return 1;
}
```

4.5 code with description

Listing 1: Hello World program (hello_world.cpp)

```
#include <iostream>
int main (){
    std::cout <<"Hello_World!" <<'\n';
    return 1;
}
```

4.6 code in java, without the CodeExpert style template

```
public class HelloWorld
{
    public static void main (String[] args)
    {
        // prints Hello World!
        System.out.println("Hello_World!");
    }
}
```