

## Part II

# Listing

**Warning:** To reproduce the listings in a L<sup>A</sup>T<sub>E</sub>X document, use the same formatting instructions as those of the documentation portion of `oops.dtx` (such as `\documentclass`, `\usepackage`, and `\newtcblisting`), and remove any `^^A`. Any deviation from the original may require tinkering.<sup>1</sup>

### Listing 1.

$\hat{x}\% \{y\} @ \{z\}\$$	$\{x\}\{y\}\{z\}$
$\hat{(x)}\% (y) @ (z)\$$	$(x)(y)(z)$
$\hat{\{x\}, \{y\} \& \{z\}\$$	$\{x\}\{y\}\{z\}$
$[\{x\}\% \{y\} @ \{z\}]$	$\{x\}\{y\}\{z\}$

### Listing 2.

 $\{x\}\{y\}\{z\}$ 

### Listing 3.

We call  $\omega_1, \dots, \omega_n$  the elementary events, and

$$\Omega = (\omega_1, \dots, \omega_n)$$

the sample space.

### Listing 4.

Let  $\{\Omega, \mathcal{F}, \mathcal{P}\}$  denote the probability space, where  $\mathcal{F} \subset 2^\Omega$ .

### Listing 5.

 $\Omega \mathcal{F} \mathcal{P}$ 

### Listing 6.

**Theorem 1 (Mittelwertsatz für  $n$  Variable)** *Es sei  $n \in \mathbb{N}$ ,  $D \subseteq \mathbb{R}^n$  eine offene Menge und  $f \in C^1(D, \mathbb{R})$ . Dann gibt es auf jeder Strecke  $[x_0, x] \subset D$  einen Punkt  $\xi \in [x_0, x]$ , so dass gilt*

$$\frac{f(x) - f(x_0)}{x - x_0} = \text{grad} f(\xi)^\top$$

<sup>1</sup>For instance, in testing v1.1, I realized `\usepackage[T1]{fontenc}` was needed, to work with `\documentclass{article}` in place of `\documentclass[full]{l3doc}`, hence added it to the documentation portion of `oops.dtx`

Listing 7.
$N \ R \ D \ C^1 \ [x_0, x]$