Five Lectures on Maple: Overview

Part I: Basic concepts

1 General principles

2 Entering commands

3 Basic operations; types of objects

4 Graphics

5 Fundamental data structures

6 User-defined functions

7 Equations and systems of equations

Part II: Analysis with Maple; Programming

1 Limits and series

2 Functions, differentiation, integration, ...

3 Control structures

4 Procedures

Part III: Data structures; Procedures in more detail; Data output

1 Tables

2 Arrays

3 Vectors and Matrices

4 Storage management

5 Stack, queue, heap

6 General form of a procedure; examples

7 Argument evaluation in procedure calls

8 Evaluation rules for variables

9 CPU stop watch

10 Formatted output; using data files

Part IV: [Numerical] Linear Algebra

Part V: Extensions; some special topics

Extra topic:

Demonstration of a parallel computation in Maple using the Grid package