

Principles of programming

math612.0 A1: From numbers through algebra to calculus and linear algebra

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Modularity

Modularity involves designing a system that is divided into a set of functional units (named modules) that can be composed into a larger application.

Any programming project should be split into logical module pieces of code which are combined into a complete program.

Modularity and functions

In many cases groups of commands can be collected together into a function.

Modularity and files

It is advisable to split larger projects into several manageable files.

Structuring an R project

Loops, for

If a piece of code is to be run repeatedly, the for-loop is normally used.

The if and ifelse commands

The "if" statement is used to conditionally execute statements.
The "ifelse" statement conditionally replaces elements of a structure.

Indenting

Code should be properly indented!

Comments

All code should contain informative comments. Comments are separated out from code using the pound symbol (`#`).

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