

---

## Chapter 2

Programming in Haskell, 2nd ed.

Connor Baker

Compiled on December 21, 2019 at 9:04pm

## 2.3 Standard Prelude

Haskell has a large standard library. A portion of the standard library, called the Prelude, is included by default in all Haskell packages. Prelude includes many useful and commonly used functions, so it serves as a core part of the standard library. It includes functions such as `+` and `*` as well as several functions used on lists (like `head`, `tail`, `take`, and `drop`).

## 2.4 Function Application

The notation for function application is a bit different than is common in mathematics. These differences are highlighted by the table below:

Mathematics	Haskell
$f(x)$	<code>f x</code>
$f(x, y)$	<code>f x y</code>
$f(g(x))$	<code>f (g x)</code>
$f(x, g(y))$	<code>f x (g y)</code>
$f(x)g(y)$	<code>f x * g y</code>

Excerpt from: Graham Hutton. “Programming in Haskell” (2nd ed.).

## 2.5 Haskell Scripts

### Naming requirements

When defining a new function, the names of the function and its arguments must begin with a lower-case letter, but can then be followed by zero or more letters (both lower- and upper-case), digits, underscores, and forward single quotes.

Excerpt from: Graham Hutton. “Programming in Haskell” (2nd ed.).

### The layout rule

Within a script, each definition at the same level must begin in precisely the same column. This layout rule makes it possible to determine the grouping of definitions from their indentation.

Excerpt from: Graham Hutton. “Programming in Haskell” (2nd ed.).