

Types

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Haskell has some basic types.

Table 3-1: Haskell's Basic Types

Type	Description	Examples
Bool	Boolean	False, True
Char	Character	'h', '7'
String	String	"101 N. College Ave."
Int	Small (machine-precision) integer	42
Integer	Arbitrarily large integer	18446744073709551616
Float	Single-precision floating point	0.33333334
Double	Double-precision floating point	0.3333333333333333

Haskell has AND and OR operators for the Bool type.

Table 3-2: Definition of the AND Operator

x	y	$x \ \&\& \ y$
False	False	False
False	True	False
True	False	False
True	True	True

Table 3-3: Definition of the OR Operator

x	y	$x \ \ y$
False	False	False
False	True	True
True	False	True
True	True	True

Haskell Operators

Table 1-2: Precedence and Associativity for Common Operators

Operation	Operator(s)	Precedence	Associativity
Composition	.	9	Right
Exponentiation	^, ^^, **	8	Right
Multiplication, division	*, /	7	Left
Addition, subtraction	+, -	6	Left
List operators	:, ++	5	Right
Equality, inequality	==, /=	4	
Comparison	<, >, <=, >=	4	
Logical AND	&&	3	Right
Logical OR		2	Right
Application	\$	0	Right

Haskell allows function types.

- ▶ A type with an arrow is a function type.

Type	Function Input	Function Output
<code>Bool -> String</code>	<code>Bool</code>	<code>String</code>
<code>Double -> Double</code>	<code>Double</code>	<code>Double</code>