Variables begin with a lowercase letter.

Type names begin with an uppercase letter.

-- comment out the rest of the line.

```
{- multiline comment -}
(nesting is allowed)
```

True and False are of type Bool.

The type is strict, only admitting those two literals.

&&, ||, not

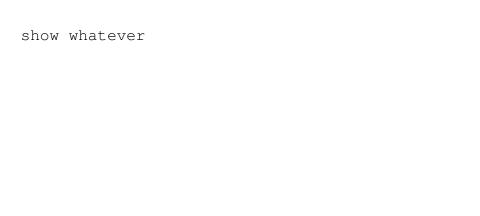
'==` and `/=`

... strict, since there's no coercion. They have integer and floating point versions.



ord :: Char -> Int chr :: Int -> Char

## A list of Chars, that is, [Char].



Surrounding an identifier with back ticks makes it infix.

Surrounding an operator with parens makes it prefix.

```
ghci> ['a', 'b', 'c'] !! 0
'a'
elem, notElem
```

nub

concat

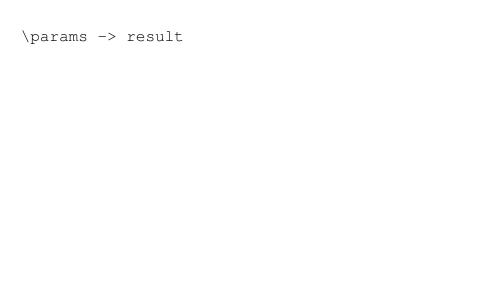
fst, snd

[a..b] is a list of all the values from a to b, inclusive.

[a..] is an infinite list from a up.

[expr | generatorOrGuard1, ..., generatorOrGuardN]

Guards are just expressions that result in Bool. No if is used.



expression where declarations

let declarations in expressions

The expression can have multiple new variables in it.

```
case expr1 of
  expr2 -> ...
  expr3 -> ...
```

```
func params =
  | boolean1 -> ...
  | boolean2 -> ...
```

A data structure whose parts don't exist until they are accessed.

iterate takes a function  ${\tt f}$  and a starting value  ${\tt n}$  and produces a lazy infinite series:

```
(n, f(n), f(f(n)), f(f(f(n))), ...)
```

It comes before a vararg, which is available as a list in the body.

(do exprs\*)

Evaluates the expressions in order and returns the value of the last. (for seq-exprs body-expr)

Takes a vector of one or more binding-form/collection-expr pairs, each followed by zero or more modifiers, and yields a lazy sequence of evaluations of expr.

Supported modifiers are: :let [binding-form expr ...], :while test, :when test.

## Use partial, followed by a function and fewer than the normal number of arguments.

```
user=> (def equals5 (partial = 5))
#'user/equals5
user=> (equals5 5)
true
```

fst **and** snd