Equational reasoning.

The point is to use no side effects/mutate state in methods or in the initialization blocks of vals.

The val and its initialization block can thus be swapped without worry.

... results in a value.



if, while, for, try, match, function calls

## f results in 2 g results in 1

For one reason, their meaning would be unclear in a function

literal.

Use curly braces around generators and filters to avoid

semicolons. Otherwise consecutive filters must be separated

with a semicolon.

...without catch. Even in Java!

The value is the value of try, unless catch or finally overrule with return.

If throw is uncaught, no value is given at all (type Nothing).

- Use goOn type Booleans.
- Use recursion.

## Optional.

do {
 //whatever
} while (condition)

```
someConstant match {
  case "salt" => "pepper"
  case "chips" => "salsa"
  case _ => "huh"
}
```



Range values.

They result in a new collection made up of yielded values.

They result in a value of type Nothing, but of course there are no instances of Nothing.

## Conceptually, each statement is in a nested scope.

```
try {
   //code
} catch{
case ex: FileNotFoundException => //handle
case ex: IOException => //handle
}
```

Scala always allows shadowing.