gsrubyl i b

```
require 'debuglog' unless $gs_nodebuglog
require 'pry' unless $gs_nopry
require 'contracts'
include Contracts
```

```
if object.in? collection
if object.not_in? collection
if object.not_nil?
str = object.pp_s
o.define_method(:add) do |x,y| \times y end
squares = (1..10).build_hash { |n| [n, n*n] }
                                                                     graph
squares.values.mapf(:to_s)
                                                                     collectf
h = squares.apply_keys { |k| k.to_s }
h = squares.apply_values { |k| k.to_s }
"foo".indent(4)
"bar".tabto(4)
USAGE = %{
   usage: prog [-o dir] -h file...
     where
        -o dir
                       outputs to DIR
                       prints this message
}.trim("|")
StringIO.string { |o| o.puts "Hi..." }
class Person
 attr_predicate
                    :young
  attr_predicate_rw :successful
end
```

Label s

Labels are safer than symbols because they guard against misspellings. They also "inspect" nicely.

Val ues

```
Person =
  GS::Value.create(name: String, age: Nat, married: Bool) do
    default married: false
    ... other methods ...
p = Person[name: 'John', age: 25]
                                         or Person.new(...)
                                         or Person['John', 25]
p.name; p.age; p.married; p.married?
p[:name], p[:age]
                                         etc.
p.with(age: 26, married: true)
p.attributes
p.values
p.values(:name, :married)
e = p.upgrade(Employee, title: 'Nurse', salary: 58400)
p = e.downgrade(Person)
Person.info
                   # "Person[name: String, ...]"
```

Values are read-only structs with Contracts built-in, default values, predicate methods, copy-constructors (*with*), transformers (*upgrade*, *downgrade*).

They combine type safety, state safety and convenience.