

# gsrubylib

```
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  x + 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 = %{\n  usage: prog [-o dir] -h file...\n  where\n      -o dir           outputs to DIR\n      -h               prints this message\n}.trim("\n")	
StringIO.string {  o  o.puts “Hi...” }	
class Person\n  attr_predicate :young\n  attr_predicate_rw :successful\nend	

## Labels

```
Result = GS::Label.create(:win, :lose,\n                          :draw)\nresult = Result.lose\nresult.to_s / to_sym / symbol / inspect\nresult == Result[:lose]
```

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

## Values

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