

# Plezuro scripting language Documentation

**P l e z u r o**

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# 2 Technical information

Language : c# 5.0  
Platform : Mono 3.2.8  
Compiler : gmcs 3.2.8.0  
Version control system : git 1.9.1  
Public repository address : <https://github.com/oprogramador/repo>  
Licence : GNU GPL 2.0

# 3 User interface specification

## 3.1 Short description

A scripting language has been implemented. On its base a non-relational database works.

## 3.2 Short tutorial

### 3.2.1 Simple example

```
$i=2;
$n=0;
:: while( {n<1000},
{
    $k = 2;
    $ispr = true;
    :: while( {k*k<=i},
    {
        :: if( i%k==0, { ispr=false }, {0});
        k=k+1
    });
    :: if( ispr , {n=n+1}, {0});
    i=i+1
});
i-1
```

### 3.2.2 Comments

```
//this is a comment

/*
```

```
Another comment
*/
```

### 3.2.3 Variables

At declaring before the variable name you should write '\$', it determines the variable scope.

```
$a = 12;
a++;
$b = a*2;
a+b^3
```

### 3.2.4 Cloning vs reference

```
$a = 21;
$b = a;
b++;
b.::println(); //it prints '22'
(a==b).::println(); //it prints 'true'

$c = 4;
$d := c;
d++;
c.::println(); //it prints '4'
(c==d).::println(); //it prints 'false'

$e = 2;
$f = e.::clone();
f++;
e.::println(); //it prints '2'
(e==f).::println(); //it prints 'false'

(1==1).::println(); //it prints 'true'
(1===1).::println(); //it prints 'false'
```

### null

### 3.2.5 Built-in classes (types)

```
//number
$x = 2.3e45;
$y = 0xff; //hexadecimal
$z = 072; //octal
$a = 0b11011; //binary

//string
$b = 'aaaaaaaaaaaaaaaaaaaaa';
$c = "wfefwfwf";

//list
$d = [1,2,3,4];
$e = ::array(1,9,3);

//dictionary
$f = ::dic(1,2,3,4);
```

```

//set
$g = :: set (3,4,5);

//error
$h = 1/0;

//class
$i = 1:: class ();

//package
$j = i:: package ();

//pair
$k = 3:4;

//procedure
$l = {1+2}

(x,y,z,a,b,c,d,e,f,g,h,i,j,k,l)

```

### 3.2.6 Tuples

```

($a, $b) = (1,3);
a:: printl ();
b:: printl ();

$c = 5;
$d = 6;
(a,b,c,d) = (b,c,d,a);

a:: printl ();
(a,b,c,d):: printl ();

a <-> c;
(a,b,c,d)

```

### 3.2.7 Conditional expressions

```

$x = 2;
:: if( x<0, {x++}, {x--});

$a = x>0 ? 'yes' : 'no';
$b = (x>0):: if({ 'yes' }, { 'no' });
$c = :: if(x>0, { 'yes' }, { 'no' });

a,b,c //it prints ("yes","yes","yes")

```

### 3.2.8 Loops

```

$i = 0;
:: while({i<20},{
    i:: printl ();
    i++
});

```

```
[1,2,3,4,5]::each({ args::println() });
::range(30,70,6.5)::each({ args::println() })
```

### 3.2.9 Procedures

```
$f = {
    ($x,$y,$z) = args;
    ::println ( 'args='+args );
    ::println ( 'x='+x );
    ::println ( 'y='+y );
    ::println ( 'z='+z );
    x+y*z };

f::applyF([2,3,4])::println();
f::time()::println(); //executing time in milliseconds; x,y,z are undefined here
{f::applyF([2,3,4])}::time()::println() //executed time; x,y,z are defined
```

#### 3.2.10 File operations

```
$txt = 'abc.txt'::fromF();

'xyz.txt'::toF($txt*20)
```

#### 3.2.11 Html table generation

```
::toF('1.html', [([1,2,3]),[4,5]]::html());
::toF('2.html', [::dic('name','Jean', 'city', 'Marseille'), ::dic('name','Tom', 'city','Mi
```

#### 3.2.12 Operator precedence (from those executed at the end)

```
;
:=
=
,
<->
<<
>>
?
|
&
<=>
>=
>
<=
<
!=
==
===
=~
```

+  
 -  
 %  
 \*  
 /  
 ^  
 Together  
 • ^^  
 • =~  
 ..  
 :

### 3.2.13 Built-in packages, classes, methods, operators and constants

- package Lang
  - class Boolean
    - Extends: [Object]
    - \* Short description : Boolean value
    - \* Operators:
      - ?
        - Arguments: (Boolean b, Pair p)
        - Returned type: Object
        - Short description : If b is *true*, it returns the first value of pair p, in other case it returns the second value.
      - |
        - Arguments: (Boolean a, Boolean b)
        - Returned type: Boolean
        - Short description : Logic alternative
      - &
        - Arguments: (Boolean a, Boolean b)
        - Returned type: Boolean
        - Short description : Logical conjunction
      - !
        - Arguments: (Boolean b)
        - Returned type: Boolean    Short description : Logical negation
    - \* Methods:
      - if
        - Arguments: (Boolean b, Procedure t, Procedure f)
        - Returned type: Object
        - Short description : Conditional instruction - if b is *true*, the procedure t is executed, otherwise the procedure f is executed.
    - \* Constants:
      - true
        - Short description : True
      - false
        - Short description : False
  - class Class
    - Extends: [Object]

- \* Short description : Class
- \* Methods:
  - parents
    - Arguments: (Class c)
    - Returned type: List
    - Short description : It returns all base classes (there is multiple inheritance).
  - package
    - Arguments: (Class c)
    - Returned type: Package
    - Short description : It returns the package that the class belongs to.
- class Dictionary
  - Extends: [Object]
  - \* Short description : Dictionary container
  - \* Operators:
    - <<
      - Arguments: (Dictionary d, Pair p)
      - Returned type: Dictionary
      - Short description : It adds a pair key-value to the dictionary.
  - \* Methods:
    - ref
      - Arguments: (Dictionary d, Object key)
      - Returned type: Object
      - Short description : It returns the reference to the value indicated by the key.
    - len
      - Arguments: (Dictionary d)
      - Returned type: Number
      - Short description : It returns the length of the dictionary.
    - contains
      - Arguments: (Dictionary d, Object key)
      - Returned type: Boolean
      - Short description : Information whether the dictionary contains the key.
    - keys
      - Arguments: (Dictionary d)
      - Returned type: List
      - Short description : It returns the list of all the keys.
    - remove
      - Arguments: (Dictionary d, Object key)
      - Returned type: Dictionary
      - Short description : It returns the new dictionary with the removed key.
- class DotFunc
  - Extends: [Object]
  - \* Short description : Pair (function, first argument)
  - \* Operators:
    - ^^
      - Arguments: (DotFunc d, Object o)
      - Returned type: Object
      - Short description : It calls the function with the arguments. The first argument is stored, the next ones are contained inside object o (Empty class object is treated as no arguments, Tuple as multiple arguments, other classes as single argument).
- class Empty
  - Extends: [Object]

- \* Short description : Empty value
- \* Methods:
  - array
    - Arguments: (Empty e)
    - Returned type: List
    - Short description : It returns an empty list.
- class Error
  - Extends: [Object]
  - \* Short description : Error
  - \* Methods:
    - msg
      - Arguments: (Error e)
      - Returned type: String
      - Short description : It returns the error message.
- class List
  - Extends: [Object]
  - \* Short description : List collection
  - \* Operators:
    - <<
      - Arguments: (List l, Object o)
      - Returned type: List
      - Short description : Pushing o object to l list.
    - >>
      - Arguments: (List l, Reference r)
      - Returned type: List
      - Short description : Popping an object from l list to r reference.
    - +
      - Arguments: (List a, List b)
      - Returned type: List
      - Short description : Two lists concatenation.
    - \*
      - Arguments: (List l, Number n)
      - Returned type: Object
      - Short description : n-times copying of l list.
  - \* Methods:
    - get
      - Arguments: (List l, Number n)
      - Returned type: Object
      - Short description : It returns n-th element of l list.
    - len
      - Arguments: (List l)
      - Returned type: Number
      - Short description : It returns l list length.
    - ref
      - Arguments: (List l, Number n)
      - Returned type: Reference
      - Short description : It returns the reference to n-th element of l list.
    - each
      - Arguments: (List l, Procedure p)
      - Returned type: Object
      - Short description : Iteration of l list, executing of p procedure for each element.



- where  
Arguments: (List l, Procedure p)  
Returned type: List  
Short description : Selection of such elements that procedure p returns *true*.
- map  
Arguments: (List l, Procedure p)  
Returned type: List  
Short description : Mapping of p procedure throw l list.
- sort  
Arguments: (List l)  
Returned type: List  
Short description : Sorting.
- orderBy  
Arguments: (List l, Procedure p)  
Returned type: List  
Short description : Sorting by the value that p procedure returns.
- orderByD  
Arguments: (List l, Procedure p)  
Returned type: List  
Short description : The same as orderBy but descending.
- groupBy  
Arguments: (List l, Procedure p)  
Returned type: List  
Short description : Grouping by the value that p procedure returns.
- reverse  
Arguments: (List l)  
Returned type: List  
Short description : List reversing.
- max  
Arguments: (List l)  
Returned type: Object  
Short description : It returns the max value.
- min  
Arguments: (List l)  
Returned type: Object  
Short description : It returns the min value.
- median  
Arguments: (List l)  
Returned type: Object  
Short description : It returns the median.
- remove  
Arguments: (List l, Number n)  
Returned type: List  
Short description : It returns the list with removed element at n index.
- toSet  
Arguments: (List l)  
Returned type: Set  
Short description : It converts to the set collection.
- html  
Arguments: (List l)  
Returned type: String  
Short description : It returns an html table.

- class NullClass
  - Extends: [Object]
  - \* Short description : Null value
  - \* Constants:
    - null
      - Short description : Null
- class Number
  - Extends: [Object]
  - \* Short description : Real number
  - \* Operators:
    - +
      - Arguments: (Number a, Number b)
      - Returned type: Number
      - Short description : Addition.
    - -
      - Arguments: (Number a, Number b)
      - Returned type: Number
      - Short description : Subtraction.
    - \*
      - Arguments: (Number a, Number b)
      - Returned type: Number
      - Short description : Multiplication.
    - /
      - Arguments: (Number a, Number b)
      - Returned type: Number
      - Short description : Division.
    - ^
      - Arguments: (Number a, Number b)
      - Returned type: Number
      - Short description : Power.
    - ++
      - Arguments: (Number a)
      - Returned type: Number
      - Short description : Incrementation.
    - --
      - Arguments: (Number a)
      - Returned type: Number
      - Short description : Decrementation.
  - \* Methods:
    - chr
      - Arguments: (Number n)
      - Returned type: String
      - Short description : It returns the character with ASCII code n.
    - sin
      - Arguments: (Number n)
      - Returned type: Number
      - Short description : Sine.
    - cos
      - Arguments: (Number n)
      - Returned type: Number
      - Short description : Cosine.

- tan  
Arguments: (Number n)  
Returned type: Number  
Short description : Tangent.
- asin  
Arguments: (Number n)  
Returned type: Number  
Short description : Arcsine.
- acos  
Arguments: (Number n)  
Returned type: Number  
Short description : Arccosine.
- atan  
Arguments: (Number n)  
Returned type: Number  
Short description : Arctangent.
- sinh  
Arguments: (Number n)  
Returned type: Number  
Short description : Hyperbolic sine.
- cosh  
Arguments: (Number n)  
Returned type: Number  
Short description : Hyperbolic cosine.
- tanh  
Arguments: (Number n)  
Returned type: Number  
Short description : Hyperbolic tangent.
- round  
Arguments: (Number n)  
Returned type: Number  
Short description : Rounding.
- floor  
Arguments: (Number n)  
Returned type: Number  
Short description : Flooring.
- ceil  
Arguments: (Number n)  
Returned type: Number  
Short description : Ceiling.
- abs  
Arguments: (Number n)  
Returned type: Number  
Short description : Absolut value.
- ln  
Arguments: (Number n)  
Returned type: Number  
Short description : Natural logarithm.
- sqrt  
Arguments: (Number n)  
Returned type: Number  
Short description : Square root.

- fib
  - Arguments: (Number n)
  - Returned type: Number
  - Short description : N-th element of the Fibonacci sequence.
- \* Constants:
  - pi
    - Short description : Pi number
  - e
    - Short description : E number
- class Object
  - Extends: []
  - \* Short description : Any object
  - \* Operators:
    - .
      - Arguments: (Object a, SoftLink s)
      - Returned type: DotFunc
      - Short description : DotFunc creation.
    - ;
      - Arguments: (Object a, Object b)
      - Returned type: Object
      - Short description : It returns b object.
    - ,
      - Arguments: (Object a, Object b)
      - Returned type: Object
      - Short description : Tuple creation.
    - ;
      - Arguments: (Reference a, Reference b, Reference c)
      - Returned type: Number
      - Short description : Swapping a and b.
    - :
      - Arguments: (Object a, Object b)
      - Returned type: Pair
      - Short description : Pair creation.
    - <=>
      - Arguments: (Object a, Object b)
      - Returned type: Number
      - Short description : It returns 1 if a is greater than b, 0 if equal, -1 if less.
    - >=
      - Arguments: (Object a, Object b)
      - Returned type: Boolean
      - Short description : It informs whether a is greater or equal to b.
    - >
      - Arguments: (Object a, Object b)
      - Returned type: Boolean
      - Short description : It informs whether a is greater then b.
    - <=
      - Arguments: (Object a, Object b)
      - Returned type: Boolean
      - Short description : It informs whether a is less or equal to b.
    - <
      - Arguments: (Object a, Object b)

- Returned type: Boolean
- Short description : It informs whether a is less than b.
- !=
  - Arguments: (Object a, Object b)
  - Returned type: Boolean
  - Short description : It informs whether a is not equal to b.
- ==
  - Arguments: (Object a, Object b)
  - Returned type: Boolean
  - Short description : It informs whether a equal to b.
- ===
  - Arguments: (Object a, Object b)
  - Returned type: Boolean
  - Short description : It informs whether a is b (the same object).
- &&
  - Arguments: (Reference r)
  - Returned type: Pointer
  - Short description : It returns the pointer to r.
- :=
  - Arguments: (Object a, Object b)
  - Returned type: Object
  - Short description : Cloning b into a, you can clone all the tuples.
- =
  - Arguments: (Object a, Object b)
  - Returned type: Boolean
  - Short description : Ascharactering b to a (reference, you can ascharacter all the tuples).
- \* Methods:
  - class
    - Arguments: (Object o)
    - Returned type: Class
    - Short description : It returns the class of o object.
  - print
    - Arguments: (Object o)
    - Returned type: Object
    - Short description : Printing o to the console.
  - println
    - Arguments: (Object o)
    - Returned type: Object
    - Short description : Printing the o to the console as the new line.
  - clone
    - Arguments: (Object o)
    - Returned type: Object
    - Short description : Cloning.
  - lent
    - Arguments: (Object o)
    - Returned type: Number
    - Short description : It returns the length of o (for Tuple object length of the tuple, for Empty object 0, for other classes objects 1.
  - set
    - Arguments: (Object o)
    - Returned type: Set
    - Short description : Set creation..

- dic
    - Arguments: (Object o)
    - Returned type: Dictionary
    - Short description : Dictionary creation.
- class Package
  - Extends: [Object]
  - \* Short description : Package (collection of classes and other packages)
  - \* Operators:
  - \* Methods:
    - package
      - Arguments: (Package p)
      - Returned type: Package
      - Short description : It returns the parent package.
  - \* Constants:
    - true
      - Short description : True
    - false
      - Short description : False
- class Pair
  - Extends: [Object]
  - \* Short description : Ordered pair (key, value)
  - \* Methods:
    - key
      - Arguments: (Pair p)
      - Returned type: Object
      - Short description : It returns the key.
    - value
      - Arguments: (Pair p)
      - Returned type: Object
      - Short description : It returns the value.
- class Pointer
  - Extends: [Object]
  - \* Short description : Pointer to an object
  - \* Operators:
    - \*\*
      - Arguments: (Pointer p)
      - Returned type: Object
      - Short description : It returns the object that p pointer points to.
- class Procedure
  - Extends: [Object]
  - \* Short description : Procedure that gives parameters and returns a value
  - \* Methods:
    - apply
      - Arguments: (Procedure p)
      - Returned type: Object
      - Short description : Calling procedure without parameters.
    - applyF
      - Arguments: (Procedure p, List l)
      - Returned type: Object
      - Short description : Calling procedure with parameters.

- while
  - Arguments: (Procedure a, Procedure b)
  - Returned type: Object
  - Short description : *while* loop, *a* procedure determines the condition, *b* procedure is executed inside.
- integral
  - Arguments: (Procedure p, Number beg, Number end)
  - Returned type: Object
  - Short description : Numerical integral.
- time
  - Arguments: (Procedure p)
  - Returned type: Number
  - Short description : It counts p procedure executing time in milliseconds.
- class Reference
  - Extends: [Object]
  - \* Short description : Reference to an object, an additional class, each object has a reference but no object is an instance of the Reference class.
- class Set
  - Extends: [Object]
  - \* Short description : Set collection
  - \* Operators:
    - <<
      - Arguments: (Set s, Object o)
      - Returned type: Object
      - Short description : Pushing o object to s set.
  - \* Methods:
    - len
      - Arguments: (Set s)
      - Returned type: Object
      - Short description : It returns the set length.
    - max
      - Arguments: (Set s)
      - Returned type: Object
      - Short description : It returns the max value.
    - min
      - Arguments: (Set s)
      - Returned type: Object
      - Short description : It returns the min value.
    - contains
      - Arguments: (Set s, Object o)
      - Returned type: Boolean
      - Short description : It informs whether the set contains the value.
    - join
      - Arguments: (Set a, Set b)
      - Returned type: Set
      - Short description : Set intersection.
    - except
      - Arguments: (Set a, Set b)
      - Returned type: Set
      - Short description : Set complement.

- union
  - Arguments: (Set a, Set b)
  - Returned type: Set
  - Short description : Set union.
- remove
  - Arguments: (Set s, Object o)
  - Returned type: Object
  - Short description : It returns the set with removed value.
- toList
  - Arguments: (Set s)
  - Returned type: Object
  - Short description : Conversion to list.
- len
  - Arguments: (Set s)
  - Returned type: Object
  - Short description : It returns the set length.
- class SoftLink
  - Extends: [Object]
  - \* Short description : Soft link
  - \* Operators:
    - ^^
      - Arguments: (SoftLink s, Object o)
      - Returned type: Object
      - Short description : Execution of the procedure pointer by the link for the arguments.
- class String
  - Extends: [Object]
  - \* Short description : Text string
  - \* Operators:
    - +
      - Arguments: (String s, Object o)
      - Returned type: String
      - Short description : Concatenation.
    - \*
      - Arguments: (String s, Number n)
      - Returned type: String
      - Short description : N-times copying.
    - #
      - Arguments: (String s)
      - Returned type: Object
      - Short description : Inserting of calculated values inside the string.
    - =~
      - Arguments: (String regex, String s)
      - Returned type: Boolean
      - Short description : It informs whether s string matches regex Regex.
  - \* Methods:
    - len
      - Arguments: (String s)
      - Returned type: Number
      - Short description : It returns the string length.
    - get
      - Arguments: (String s, Number n)



- Returned type: String
- Short description : It returns the n-th character.
- reverse
  - Arguments: (String s)
  - Returned type: String
  - Short description : It returns the reversed string.
- ord
  - Arguments: (String s)
  - Returned type: Number
  - Short description : It returns the ASCII code of the first character.
- fromF
  - Arguments: (String s)
  - Returned type: String
  - Short description : It reads the file content into string.
- toF
  - Arguments: (String s, String f)
  - Returned type: Boolean
  - Short description : It writes s string to f file, the returned value informs about the success.
- put
  - Arguments: (String f, String s)
  - Returned type: Boolean
  - Short description : It writes s string to f file, the returned value informs about the success.
- putA
  - Arguments: (String f, String s)
  - Returned type: Boolean
  - Short description : It appends s string to f file, the returned value informs about the success.
- append
  - Arguments: (String s, String f)
  - Returned type: Boolean
  - Short description : It appends s string to f file, the returned value informs about the success.
- load
  - Arguments: (String s)
  - Returned type: Object
  - Short description : It executes the module written in a file.
- eval
  - Arguments: (String s)
  - Returned type: Object
  - Short description : It returns the code inside a string.
- class Tuple
  - Extends: [Object]
  - \* Short description : Tuple collection, each tuple contains minimum 2 elements.

## 4 Developer specification

### 4.1 How to download, compile and run?

1. Install any distribution of GNU/Linux operating system (next instructions for Debian derivatives).  
You can use : <http://www.linuxmint.com/download.php>.

2. Install mono. Use terminal command : *sudo apt-get install monodevelop mono-complete.*
3. Install git, although it should be built-in in your distribution : *sudo apt-get install git*
4. Create a new directory and go inside it : *mkdir project1; cd project1*
5. Download the project : *git download https://github.com/oprogramador/repo.git; cd repo*
6. Compile : *./make.sh*
7. Go one directory level up : *cd ..*
8. Run : *./calc.exe*

You can also try compiling it on Windows using either Visual Studio or Mono.

## 4.2 Code

### 4.2.1 Files, namespaces (adequate to directories), classes, interfaces, enumerations, inheritance

```

Gui/IOPanel.cs: class IOPanel : Panel
Gui/IClickable.cs: public interface IClickable
Gui/InputBox.cs: class InputBox : IOBox, ITexttable
Gui/MyItem.cs: public class MyItem
Gui/MyMenu.cs: public class MyMenu : MainMenu
Gui/OutputBox.cs: class OutputBox : IOBox, IOutputtable
Gui/FormAdapter.cs: public class FormAdapter
Gui/IOBox.cs: class IOBox : RichTextBox
Gui/MainPanel.cs: class MainPanel : Panel
Gui/Clickable.cs: public interface Clickable
Gui/MainWindow.cs: class MainWindow : Form
Gui/VisualSyntax.cs: class VisualSyntax
MyTypes/IStepable.cs: interface IStepable : IVariable
MyTypes/CircularInheritanceException.cs: class CircularInheritanceException : Exception
MyTypes/ITuplable.cs: public interface ITuplable
MyTypes/NotComparableException.cs: class NotComparableException : Exception
MyTypes/InfinityException.cs: class InfinityException : NumberException
MyTypes/IVariable.cs: public interface IVariable : ICompCloneable, IStringable, ITuplable
MyTypes/LambdaConverter.cs: static class LambdaConverter
MyTypes/IStringable.cs: public interface IStringable
MyTypes/IItem.cs: public interface IItem : IVariable
MyTypes/NoMethodException.cs: class NoMethodException : Exception
MyTypes/AccessModifier.cs: public enum AccessEnum
MyTypes/AccessModifier.cs: public class AccessModifier
MyTypes/ModuleNotFoundException.cs: class ModuleNotFoundException : Exception
MyTypes/NaNException.cs: class NaNException : NumberException
MyTypes/VariableFactory.cs: class VariableFactory
MyTypes/NumberException.cs: class NumberException : Exception
MyTypes/UndefinedException.cs: class UndefinedException : Exception
MyTypes/MyClasses/ObjectT.cs: class ObjectT : IVariable
MyTypes/MyClasses/BuiltinClass.cs: class BuiltinClass : ClassT
MyTypes/MyClasses/CallFunc.cs: class CallFunc : IVariable
MyTypes/MyClasses/PairT.cs: public class PairT : IVariable
MyTypes/MyClasses/RangeT.cs: class RangeT : IVariable, IEnumerable
MyTypes/MyClasses/ClassT.cs: public class ClassT : IItem, IVariable, ICallable
MyTypes/MyClasses/SoftLink.cs: class SoftLink : Pointer<string>, IVariable

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MyTypes/MyClasses/BuiltinFunc.cs: class BuiltinFunc : IVariable, ICallable
MyTypes/MyClasses/ErrorT.cs: class ErrorT : IVariable
MyTypes/MyClasses/StopPoint.cs: class StopPoint : IVariable
MyTypes/MyClasses/ProcedureT.cs: public class ProcedureT : OStack, ICallable
MyTypes/MyClasses/BooleanT.cs: class BooleanT : Pointer<bool>, IVariable
MyTypes/MyClasses/ListT.cs: public class ListT : SList<ICompCloneable>, IVariable
MyTypes/MyClasses/TupleT.cs: public class TupleT : SList<IVariable>, IVariable
MyTypes/MyClasses/MyClass.cs: class MyClass : ClassT
MyTypes/MyClasses/PointerT.cs: class PointerT : Pointer<ReferenceT>, IVariable
MyTypes/MyClasses/SetT.cs: class SetT : SortedSet<IVariable>, IVariable
MyTypes/MyClasses/Method.cs: public class Method : IVariable, ICallable
MyTypes/MyClasses/Callable.cs: class Callable
MyTypes/MyClasses/NullType.cs: class NullType : IVariable
MyTypes/MyClasses/StringT.cs: class StringT : Pointer<string>, IVariable
MyTypes/MyClasses/StringT.cs: class MiniParser : IParseable
MyTypes/MyClasses/Number.cs: class Number : Pointer<double>, IVariable
MyTypes/MyClasses/MyObject.cs: class MyObject : IVariable
MyTypes/MyClasses/PackageT.cs: public class PackageT : List<IItem>, IItem, IVariable
MyTypes/MyClasses/DictionaryT.cs: public class DictionaryT : SortedDictionary<IVariable, IVariable>, IVariable
MyTypes/MyClasses/ReferenceT.cs: public class ReferenceT : Pointer<IVariable>, IVariable, ITypeConvertible
MyTypes/MyClasses/DotFunc.cs: class DotFunc : IVariable, ICallable
MyTypes/MyClasses/EmptyT.cs: class EmptyT : IVariable
MyTypes/ICallable.cs: public interface ICallable : IComparable
MyTypes/ObjectContainer.cs: class ObjectContainer : List<IVariable>
MyTypes/Variable.cs: static class Variable
Maths/NumberCalcul.cs: static class NumberCalcul
Engine/IOutputable.cs: interface IOutputable : ITexttable
Engine/Tokenizer.cs: class Tokenizer
Engine/SymbolMap.cs: class SymbolMap : ConcurrentDictionary<string, object>
Engine/Engine.cs: class Engine
Engine/ErrorText.cs: class ErrorText
Engine/StaticParser.cs: static class StaticParser
Engine/RPNTypes.cs: enum RPNTypes
Engine/SyntaxException.cs: class SyntaxException : Exception
Engine/RPN.cs: class RPN
Engine/Evaluator.cs: class Evaluator : IPrintable
Engine/IOMap.cs: class IOMap : Dictionary<ITexttable, IOutputable>, IRefreshable
Engine/TokenConverter.cs: class TokenConverter
Engine/SymbolException.cs: class SymbolException : Exception
Engine/Parser.cs: class Parser
Program.cs: class Program
lib/HtmlTable.cs: abstract class HtmlTable
lib/SimpleTypeConverter.cs: static class SimpleTypeConverter
lib/HtmlArrayTable.cs: class HtmlArrayTable : HtmlTable
lib/ITypeConvertible.cs: interface ITypeConvertible
lib/Integral.cs: class Integral
lib/Co.cs: class Co
lib/HtmlDicTable.cs: class HtmlDicTable : HtmlTable
lib/HtmlTableFactory.cs: static class HtmlTableFactory
DataFixtures/DataFixtures.cs: class DataFixtures : SetT
MyCollections/ICompCloneable.cs: public interface ICompCloneable : IComparable, ICloneable
MyCollections/Pointer.cs: public class Pointer<T>
MyCollections/IEvalable.cs: public interface IEvalable
MyCollections/TokenTypes.cs: public enum TokenTypes

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MyCollections/TokenTypes.cs: public static class TokenTypesExtension  
MyCollections/Token.cs: public class Token  
MyCollections/ITextable.cs: public interface ITexttable  
MyCollections/TypeTrans.cs: public static class TypeTrans  
MyCollections/WStack.cs: public class WStack<T> : Stack<T>, IVariable  
MyCollections/IValuable.cs: interface IValuable  
MyCollections/IParseable.cs: interface IParseable  
MyCollections/SList.cs: public class SList<T> : CList<T>, ICompCloneable where T : ICompCloneable  
MyCollections/SortedSet.cs: class SortedSet<T> : SortedDictionary<T,int>  
MyCollections/General.cs: static class General  
MyCollections/EmptyArgException.cs: class EmptyArgException : Exception  
MyCollections/CList.cs: public class CList<T> : WList<T> where T: IComparable  
MyCollections/WList.cs: public class WList<T> : List<T>  
MyCollections/NullArg.cs: class NullArg  
MyCollections/ConcurrentDictionary.cs: public class ConcurrentDictionary<TKey, TValue> : Dictionary<TKey, TValue>  
MyCollections/OStack.cs: public class OStack : WStack<object>  
MyCollections/IPrintable.cs: public interface IPrintable : IEvalable, IVariable  
MyCollections/DefaultType.cs: class DefaultType  
Info/Help.cs: class Help  
Info/Info.cs: class Info  
Controller/Controller.cs: class Controller  
Controller/IRefreshable.cs: interface IRefreshable  
Tests/TestUnit.cs: class TestUnit