

Languages-beta: SIMPLE-Funcons-Index *

The PLanCompS Project

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*Suggestions for improvement: plancomps@gmail.com.
Reports of issues: <https://github.com/plancomps/CBS-beta/issues>.

Computations

Normal computation

Flowing

```
[ Funcon sequential  
  Alias seq  
  Funcon effect  
  Funcon if-true-else  
  Alias if-else  
  Funcon while-true  
  Alias while ]
```

Giving

```
[ Funcon initialise-giving  
  Funcon give  
  Funcon given  
  Funcon left-to-right-repeat ]
```

Binding

```
[ Type environments  
  Alias envs  
  Datatype identifiers  
  Alias ids  
  Funcon initialise-binding  
  Funcon bind-value  
  Alias bind  
  Funcon bound-value  
  Alias bound  
  Funcon scope  
  Funcon collateral ]
```

Storing

```
[ Funcon initialise-storing  
  Datatype variables  
  Alias vars  
  Funcon allocate-variable  
  Alias alloc  
  Funcon allocate-initialised-variable  
  Alias alloc-init  
  Funcon assign  
  Funcon assigned ]
```

Interacting

Input

```
[ Funcon read ]
```

Output

[*Funcon* **print**]

Abnormal computation

Failing

[*Funcon* **finalise-failing**
Funcon **checked**]

Throwing

[*Funcon* **finalise-throwing**
Funcon **throw**
Funcon **handle-thrown**]

Returning

[*Funcon* **return**
Funcon **handle-return**]

Values

Value Types

[*Type* **values**
Alias **vals**
Funcon **is-equal**
Alias **is-eq**]

Primitive values

Booleans

[*Funcon* **true**
Funcon **false**
Funcon **not**]

Integers

```
[ Type  natural-numbers
  Alias  nats
  Funcon integer-add
  Alias  int-add
  Funcon integer-subtract
  Alias  int-sub
  Funcon integer-multiply
  Alias  int-mul
  Funcon integer-divide
  Alias  int-div
  Funcon integer-modulo
  Alias  int-mod
  Funcon integer-negate
  Alias  int-neg
  Funcon integer-is-less
  Alias  is-less
  Funcon integer-is-less-or-equal
  Alias  is-less-or-equal
  Funcon integer-is-greater
  Alias  is-greater
  Funcon integer-is-greater-or-equal
  Alias  is-greater-or-equal
  Funcon decimal-natural
  Alias  decimal ]
```

The null value

```
[ Datatype null-type
  Funcon null-value
  Alias  null ]
```

Composite values

Sequences of values

```
[ Funcon length
  Funcon index ]
```

Tuples

```
[ Datatype tuples ]
```

Vectors

```
[ Datatype vectors
  Funcon vector
  Funcon vector-elements ]
```

Abstraction values

Generic abstractions

```
[ Funcon closure ]
```

Functions

```
[ Datatype functions  
  Funcon function  
  Funcon apply ]
```

Patterns

```
[ Datatype patterns  
  Funcon pattern  
  Funcon match ]
```