

# Předdefinované hodnoty native!

Poznámka překladatele:

Tuto kapitolu prozatím nepřekládám, neboť v ní převládají nepřeložitelné termíny programovacího jazyka.

## all

### USAGE:

ALL conds

### DESCRIPTION:

Evaluates and returns the last value if all are truthy; else NONE.  
ALL is a native! value.

### ARGUMENTS:

conds            [block!]

## any

### USAGE:

ANY conds

### DESCRIPTION:

Evaluates and returns the first truthy value, if any; else NONE.  
ANY is a native! value.

### ARGUMENTS:

conds            [block!]

## arccosine

### USAGE:

ARCCOSINE cosine

### DESCRIPTION:

Returns the trigonometric arccosine (in degrees by default in range [0,180]).  
ARCCOSINE is a native! value.

### ARGUMENTS:

cosine            [number!] "in range [-1,1]."

### REFINEMENTS:

/radians        => Angle is returned in radians [0,pi].

RETURNS:  
[float!]

## arcsine

USAGE:  
ARCSINE sine

DESCRIPTION:  
Returns the trigonometric arcsine (in degrees by default in range  $[-90,90]$ ).  
ARCSINE is a native! value.

ARGUMENTS:  
sine [number!] "in range  $[-1,1]$ ."

REFINEMENTS:  
/radians => Angle is returned in radians  $[-\pi/2, \pi/2]$ .

RETURNS:  
[float!]

## arctangent

USAGE:  
ARCTANGENT tangent

DESCRIPTION:  
Returns the trigonometric arctangent (in degrees by default in range  $[-90,90]$ ).  
ARCTANGENT is a native! value.

ARGUMENTS:  
tangent [number!] "in range  $[-\infty, +\infty]$ ."

REFINEMENTS:  
/radians => Angle is returned in radians  $[-\pi/2, \pi/2]$ .

RETURNS:  
[float!]

## arctangent2

USAGE:  
ARCTANGENT2 y x

**DESCRIPTION:**

Returns the smallest angle between the vectors (1,0) and (x,y) in degrees by default (-180,180].

ARCTANGENT2 is a native! value.

**ARGUMENTS:**

y	[number!]
x	[number!]

**REFINEMENTS:**

/radians => Angle is returned in radians (-pi,pi].

**RETURNS:**

[float!]

## as

**USAGE:**

AS type spec

**DESCRIPTION:**

Coerce a series into a compatible datatype without copying it.

AS is a native! value.

**ARGUMENTS:**

type	[datatype! block! paren! any-path! any-string!]	"The datatype or example value."
spec	[block! paren! any-path! any-string!]	"The series to coerce."

## as-money

**USAGE:**

AS-MONEY currency amount

**DESCRIPTION:**

Combine currency code and amount into a monetary value.

AS-MONEY is a native! value.

**ARGUMENTS:**

currency	[word!]
amount	[integer! float!]

**RETURNS:**

[money!]

## as-pair

### USAGE:

AS-PAIR x y

### DESCRIPTION:

Combine X and Y values into a pair.

AS-PAIR is a native! value.

### ARGUMENTS:

x [integer! float!]

y [integer! float!]

## bind

### USAGE:

BIND word context

### DESCRIPTION:

Bind words to a context; returns rebound words.

BIND is a native! value.

### ARGUMENTS:

word [block! any-word!]

context [any-word! any-object! function!]

### REFINEMENTS:

/copy => Deep copy blocks before binding.

### RETURNS:

[block! any-word!]

## break

### USAGE:

BREAK

### DESCRIPTION:

Breaks out of a loop, while, until, repeat, foreach, etc.

BREAK is a native! value.

### REFINEMENTS:

/return value => Forces the loop function to return a value.  
[any-type!]

## browse

### USAGE:

BROWSE url

### DESCRIPTION:

Open web browser to a URL or file manager to a local file.

BROWSE is a native! value.

### ARGUMENTS:

url                   [url! file!]

## call

### USAGE:

CALL cmd

### DESCRIPTION:

Executes a shell command to run another process.

CALL is a native! value.

### ARGUMENTS:

cmd                   [string! file!] "A shell command or an executable file."

### REFINEMENTS:

/wait               => Runs command and waits for exit.

/show               => Force the display of system's shell window (Windows only).

/console           => Runs command with I/O redirected to console (CLI console only at present).

/shell             => Forces command to be run from shell.

/input             =>

    in             [string! file! binary!] "Redirects in to stdin."

/output           =>

    out            [string! file! binary!] "Redirects stdout to out."

/error            =>

    err            [string! file! binary!] "Redirects stderr to err."

### RETURNS:

0 if success, -1 if error, or a process ID.

[integer!]

## case

### USAGE:

CASE cases

**DESCRIPTION:**

Evaluates the block following the first truthy condition.  
 CASE is a native! value.

**ARGUMENTS:**

cases [block!] "Block of condition-block pairs."

**REFINEMENTS:**

/all => Test all conditions, evaluating the block following each truthy condition.

## catch

**USAGE:**

CATCH block

**DESCRIPTION:**

Catches a throw from a block and returns its value.  
 CATCH is a native! value.

**ARGUMENTS:**

block [block!] "Block to evaluate."

**REFINEMENTS:**

/name => Catches a named throw.  
 word [word! block!] "One or more names."

## checksum

**USAGE:**

CHECKSUM data method

**DESCRIPTION:**

Computes a checksum, CRC, hash, or HMAC.  
 CHECKSUM is a native! value.

**ARGUMENTS:**

data [binary! string! file!]  
 method [word!] {MD5 SHA1 SHA256 SHA384 SHA512 CRC32 TCP ADLER32 hash.}

**REFINEMENTS:**

/with => Extra value for HMAC key or hash table size; not compatible with TCP/CRC32/ADLER32 methods.

spec [any-string! binary! integer!] {String or binary for MD5/SHA\* HMAC key, integer for hash table size.}

**RETURNS:**

[integer! binary!]

## compliment?

### USAGE:

COMPLEMENT? bits

### DESCRIPTION:

Returns TRUE if the bitset is complemented.  
COMPLEMENT? is a native! value.

### ARGUMENTS:

bits            [bitset!]

## compose

### USAGE:

COMPOSE value

### DESCRIPTION:

Returns a copy of a block, evaluating only parens.  
COMPOSE is a native! value.

### ARGUMENTS:

value            [block!]

### REFINEMENTS:

/deep            => Compose nested blocks.  
/only            => Compose nested blocks as blocks containing their values.  
/into            => Put results in out block, instead of creating a new block.  
out              [any-block!] "Target block for results, when /into is used."

## compress

### USAGE:

COMPRESS data

### DESCRIPTION:

compresses data. return GZIP format (RFC 1952) by default.  
COMPRESS is a native! value.

### ARGUMENTS:

data            [any-string! binary!]

### REFINEMENTS:

```
/zlib      => Return ZLIB format (RFC 1950).  
/deflate   => Return DEFLATE format (RFC 1951).
```

## construct

### USAGE:

```
CONSTRUCT block
```

### DESCRIPTION:

Makes a new object from an unevaluated spec; standard logic words are evaluated.  
CONSTRUCT is a native! value.

### ARGUMENTS:

```
block      [block!]
```

### REFINEMENTS:

```
/with      => Use a prototype object.  
    object [object!] "Prototype object."  
/only      => Don't evaluate standard logic words.
```

## context?

### USAGE:

```
CONTEXT? word
```

### DESCRIPTION:

Returns the context to which a word is bound.  
CONTEXT? is a native! value.

### ARGUMENTS:

```
word      [any-word!] "Word to check."
```

### RETURNS:

```
[object! function! none!]
```

## continue

### USAGE:

```
CONTINUE
```

### DESCRIPTION:

Throws control back to top of loop.  
CONTINUE is a native! value.



## cosine

### USAGE:

`COSINE angle`

### DESCRIPTION:

Returns the trigonometric cosine.  
COSINE is a native! value.

### ARGUMENTS:

`angle`            `[number!]`

### REFINEMENTS:

`/radians`        => Angle is specified in radians.

### RETURNS:

`[float!]`

## debase

### USAGE:

`DEBASE value`

### DESCRIPTION:

Decodes binary-coded string (BASE-64 default) to binary value.  
DEBASE is a native! value.

### ARGUMENTS:

`value`            `[string!] "The string to decode."`

### REFINEMENTS:

`/base`            => Binary base to use.

`base-value`      `[integer!] "The base to convert from: 64, 58, 16, or 2."`

## decompress

### USAGE:

`DECOMPRESS data`

### DESCRIPTION:

Decompresses data. Data in GZIP format (RFC 1952) by default.  
DECOMPRESS is a native! value.

### ARGUMENTS:

`data`            `[binary!]`

**REFINEMENTS:**

```

/zlib      => Data in ZLIB format (RFC 1950).
  size      [integer!] "Uncompressed data size. Use 0 if don't know."
/deflate   => Data in DEFLATE format (RFC 1951).
  size      [integer!] "Uncompressed data size. Use 0 if don't know."

```

## dehex

**USAGE:**

```
DEHEX value
```

**DESCRIPTION:**

Converts URL-style hex encoded (%xx) strings.  
DEHEX is a native! value.

**ARGUMENTS:**

```
value      [any-string!]
```

**RETURNS:**

Always return a string.  
[string!]

## difference

**USAGE:**

```
DIFFERENCE set1 set2
```

**DESCRIPTION:**

Returns the special difference of two data sets.  
DIFFERENCE is a native! value.

**ARGUMENTS:**

```
set1      [block! hash! string! bitset! typeset! date!]
set2      [block! hash! string! bitset! typeset! date!]
```

**REFINEMENTS:**

```

/case      => Use case-sensitive comparison.
/skip      => Treat the series as fixed size records.
  size      [integer!]

```

**RETURNS:**

```
[block! hash! string! bitset! typeset! time!]
```

## do

### USAGE:

DO value

### DESCRIPTION:

Evaluates a value, returning the last evaluation result.

DO is a native! value.

### ARGUMENTS:

value            [any-type!]

### REFINEMENTS:

/expand        => Expand directives before evaluation.

/args          => If value is a script, this will set its system/script/args.

arg            "Args passed to a script (normally a string)."

/next         => Do next expression only, return it, update block word.

position      [word!] "Word updated with new block position."

## does

### USAGE:

DOES body

### DESCRIPTION:

Defines a function with no arguments or local variables.

DOES is a native! value.

### ARGUMENTS:

body           [block!]

## either

### USAGE:

EITHER cond true-blk false-blk

### DESCRIPTION:

If conditional expression is truthy, evaluate the first branch; else evaluate the alternative.

EITHER is a native! value.

### ARGUMENTS:

cond           [any-type!]

true-blk      [block!]

false-blk     [block!]

## enbase

### USAGE:

ENBASE value

### DESCRIPTION:

Encodes a string into a binary-coded string (BASE-64 default).

ENBASE is a native! value.

### ARGUMENTS:

value [binary! string!] "If string, will be UTF8 encoded."

### REFINEMENTS:

/base => Binary base to use.

base-value [integer!] "The base to convert from: 64, 58, 16, or 2."

## enhex

### USAGE:

ENHEX value

### DESCRIPTION:

Encode URL-style hex encoded (%xx) strings.

ENHEX is a native! value.

### ARGUMENTS:

value [any-string!]

### RETURNS:

Always return a string.

[string!]

## equal?

### USAGE:

EQUAL? value1 value2

### DESCRIPTION:

Returns TRUE if two values are equal.

EQUAL? is a native! value.

### ARGUMENTS:

value1 [any-type!]

value2 [any-type!]

## exclude

### USAGE:

EXCLUDE set1 set2

### DESCRIPTION:

Returns the first data set less the second data set.

EXCLUDE is a native! value.

### ARGUMENTS:

set1 [block! hash! string! bitset! typeset!]

set2 [block! hash! string! bitset! typeset!]

### REFINEMENTS:

/case => Use case-sensitive comparison.

/skip => Treat the series as fixed size records.

size [integer!]

### RETURNS:

[block! hash! string! bitset! typeset!]

## exit

### USAGE:

EXIT

### DESCRIPTION:

Exits a function, returning no value.

EXIT is a native! value.

## exp

### USAGE:

EXP value

### DESCRIPTION:

Raises E (the base of natural logarithm) to the power specified.

EXP is a native! value.

### ARGUMENTS:

value [number!]

### RETURNS:

[float!]

## extend

### USAGE:

EXTEND obj spec

### DESCRIPTION:

Extend an object or map value with list of key and value pairs.  
EXTEND is a native! value.

### ARGUMENTS:

obj	[object! map!]
spec	[block! hash! map!]

### REFINEMENTS:

/case => Use case-sensitive comparison.

## forall

### USAGE:

FORALL 'word body

### DESCRIPTION:

Evaluates body for all values in a series.  
FORALL is a native! value.

### ARGUMENTS:

'word	[word!] "Word referring to series to iterate over."
body	[block!]

## foreach

### USAGE:

FOREACH 'word series body

### DESCRIPTION:

Evaluates body for each value in a series.  
FOREACH is a native! value.

### ARGUMENTS:

'word	[word! block!] "Word, or words, to set on each iteration."
series	[series! map!]
body	[block!]

## forever

### USAGE:

FOREVER body

### DESCRIPTION:

Evaluates body repeatedly forever.  
FOREVER is a native! value.

### ARGUMENTS:

body            [block!]

## func

### USAGE:

FUNC spec body

### DESCRIPTION:

Defines a function with a given spec and body.  
FUNC is a native! value.

### ARGUMENTS:

spec            [block!]  
body            [block!]

## function

### USAGE:

FUNCTION spec body

### DESCRIPTION:

Defines a function, making all set-words found in body, local.  
FUNCTION is a native! value.

### ARGUMENTS:

spec            [block!]  
body            [block!]

### REFINEMENTS:

/extern        => Exclude words that follow this refinement.

## get

### USAGE:

GET word

DESCRIPTION:

Returns the value a word refers to.  
GET is a native! value.

ARGUMENTS:

word            [any-word! any-path! object!]

REFINEMENTS:

/any            => If word has no value, return UNSET rather than causing an error.  
/case           => Use case-sensitive comparison (path only).

RETURNS:

[any-type!]

## get-env

USAGE:

GET-ENV var

DESCRIPTION:

Returns the value of an OS environment variable (for current process).  
GET-ENV is a native! value.

ARGUMENTS:

var            [any-string! any-word!] "Variable to get."

RETURNS:

[string! none!]

## greater-or-equal?

USAGE:

GREATER-OR-EQUAL? value1 value2

DESCRIPTION:

Returns TRUE if the first value is greater than or equal to the second.  
GREATER-OR-EQUAL? is a native! value.

ARGUMENTS:

value1        [any-type!]  
value2        [any-type!]



## greater

### USAGE:

GREATER? value1 value2

### DESCRIPTION:

Returns TRUE if the first value is greater than the second.

GREATER? is a native! value.

### ARGUMENTS:

value1           [any-type!]

value2           [any-type!]

## has

### USAGE:

HAS vars body

### DESCRIPTION:

Defines a function with local variables, but no arguments.

HAS is a native! value.

### ARGUMENTS:

vars             [block!]

body            [block!]

## if

### USAGE:

IF cond then-blk

### DESCRIPTION:

If conditional expression is truthy, evaluate block; else return NONE.

IF is a native! value.

### ARGUMENTS:

cond            [any-type!]

then-blk        [block!]

## in

### USAGE:

IN object word

**DESCRIPTION:**

Returns the given word bound to the object's context.  
IN is a native! value.

**ARGUMENTS:**

object	[any-object!]
word	[any-word!]

## intersect

**USAGE:**

INTERSECT set1 set2

**DESCRIPTION:**

Returns the intersection of two data sets.  
INTERSECT is a native! value.

**ARGUMENTS:**

set1	[block! hash! string! bitset! typeset!]
set2	[block! hash! string! bitset! typeset!]

**REFINEMENTS:**

/case	=> Use case-sensitive comparison.
/skip	=> Treat the series as fixed size records.
size	[integer!]

**RETURNS:**

[block! hash! string! bitset! typeset!]

## lesser-or-equal?

**USAGE:**

LESSER-OR-EQUAL? value1 value2

**DESCRIPTION:**

Returns TRUE if the first value is less than or equal to the second.  
LESSER-OR-EQUAL? is a native! value.

**ARGUMENTS:**

value1	[any-type!]
value2	[any-type!]

## lesser?

**USAGE:**

LESSER? value1 value2

DESCRIPTION:

Returns TRUE if the first value is less than the second.  
LESSER? is a native! value.

ARGUMENTS:

value1	[any-type!]
value2	[any-type!]

## list-env

USAGE:

LIST-ENV

DESCRIPTION:

Returns a map of OS environment variables (for current process).  
LIST-ENV is a native! value.

RETURNS:

[map!]

## log-10

USAGE:

LOG-10 value

DESCRIPTION:

Returns the base-10 logarithm.  
LOG-10 is a native! value.

ARGUMENTS:

value	[number!]
-------	-----------

RETURNS:

[float!]

## log-2

USAGE:

LOG-2 value

DESCRIPTION:

Return the base-2 logarithm.  
LOG-2 is a native! value.

ARGUMENTS:  
value [number!]

RETURNS:  
[float!]

## log-e

USAGE:  
LOG-E value

DESCRIPTION:  
Returns the natural (base-E) logarithm of the given value.  
LOG-E is a native! value.

ARGUMENTS:  
value [number!]

RETURNS:  
[float!]

## loop

USAGE:  
LOOP count body

DESCRIPTION:  
Evaluates body a number of times.  
LOOP is a native! value.

ARGUMENTS:  
count [integer! float!]  
body [block!]

## lowercase

USAGE:  
LOWERCASE string

DESCRIPTION:  
Converts string of characters to lowercase.  
LOWERCASE is a native! value.

ARGUMENTS:

```
string      [any-string! char!] "Value to convert (modified when series)."
```

REFINEMENTS:

```
/part      => Limits to a given length or position.  
  limit    [number! any-string!]
```

RETURNS:

```
[any-string! char!]
```

## max

USAGE:

```
MAX value1 value2
```

DESCRIPTION:

Returns the greater of the two values.  
MAX is a native! value.

ARGUMENTS:

```
value1      [scalar! series!]  
value2      [scalar! series!]
```

## min

USAGE:

```
MIN value1 value2
```

DESCRIPTION:

Returns the lesser of the two values.  
MIN is a native! value.

ARGUMENTS:

```
value1      [scalar! series!]  
value2      [scalar! series!]
```

## NaN?

USAGE:

```
NAN? value
```

DESCRIPTION:

Returns TRUE if the number is Not-a-Number.  
NAN? is a native! value.

ARGUMENTS:

value            [number!]

RETURNS:  
[logic!]

## negative?

USAGE:  
NEGATIVE? number

DESCRIPTION:  
Returns TRUE if the number is negative.  
NEGATIVE? is a native! value.

ARGUMENTS:  
number            [number! money! time!]

RETURNS:  
[logic!]

## new-line

USAGE:  
NEW-LINE position value

DESCRIPTION:  
Sets or clears the new-line marker within a list series.  
NEW-LINE is a native! value.

ARGUMENTS:  
position          [any-list!] "Position to change marker (modified)."  
value            [logic!] "Set TRUE for newline."

REFINEMENTS:  
/all              => Set/clear marker to end of series.  
/skip            => Set/clear marker periodically to the end of the series.  
size             [integer!]

RETURNS:  
[any-list!]

## new-line?

USAGE:  
NEW-LINE? position

**DESCRIPTION:**

Returns the state of the new-line marker within a list series.  
NEW-LINE? is a native! value.

**ARGUMENTS:**

position      [any-list!] "Position to change marker."

**RETURNS:**

[any-list!]

## not

**USAGE:**

NOT value

**DESCRIPTION:**

Returns the logical complement of a value (truthy or falsy).  
NOT is a native! value.

**ARGUMENTS:**

value            [any-type!]

## not-equal?

**USAGE:**

NOT-EQUAL? value1 value2

**DESCRIPTION:**

Returns TRUE if two values are not equal.  
NOT-EQUAL? is a native! value.

**ARGUMENTS:**

value1           [any-type!]  
value2           [any-type!]

## now

**USAGE:**

NOW

**DESCRIPTION:**

Returns date and time.  
NOW is a native! value.

#### REFINEMENTS:

/year	=> Returns year only.
/month	=> Returns month only.
/day	=> Returns day of the month only.
/time	=> Returns time only.
/zone	=> Returns time zone offset from UTC (GMT) only.
/date	=> Returns date only.
/weekday	=> Returns day of the week as integer (Monday is day 1).
/yday	=> Returns day of the year (Julian).
/precise	=> High precision time.
/utc	=> Universal time (no zone).

#### RETURNS:

[date! time! integer!]

## parse

#### USAGE:

PARSE input rules

#### DESCRIPTION:

Process a series using dialectal grammar rules.  
PARSE is a native! value.

#### ARGUMENTS:

input	[binary! any-block! any-string!]
rules	[block!]

#### REFINEMENTS:

/case	=> Uses case-sensitive comparison.
/part	=> Limit to a length or position.
length	[number! series!]
/trace	=>
callback	[function! [event [word!] match? [logic!] rule [block!] input [series!] stack [block!] return: [logic!]]]

#### RETURNS:

[logic! block!]

## positive?

#### USAGE:

POSITIVE? number

#### DESCRIPTION:

Returns TRUE if the number is positive.  
POSITIVE? is a native! value.



ARGUMENTS:  
    number           [number! money! time!]

RETURNS:  
    [logic!]

## prin

USAGE:  
    PRIN value

DESCRIPTION:  
    Outputs a value.  
    PRIN is a native! value.

ARGUMENTS:  
    value           [any-type!]

## print

USAGE:  
    PRINT value

DESCRIPTION:  
    Outputs a value followed by a newline.  
    PRINT is a native! value.

ARGUMENTS:  
    value           [any-type!]

## recycle

USAGE:  
    RECYCLE

DESCRIPTION:  
    Recycles unused memory.  
    RECYCLE is a native! value.

REFINEMENTS:  
    /on           => Turns on garbage collector.  
    /off          => Turns off garbage collector.

## reduce

### USAGE:

REDUCE value

### DESCRIPTION:

Returns a copy of a block, evaluating all expressions.

REDUCE is a native! value.

### ARGUMENTS:

value            [any-type!]

### REFINEMENTS:

/into           => Put results in out block, instead of creating a new block.  
out             [any-block!] "Target block for results, when /into is used."

## remove-each

### USAGE:

REMOVE-EACH 'word data body

### DESCRIPTION:

Removes values for each block that returns truthy value.

REMOVE-EACH is a native! value.

### ARGUMENTS:

'word           [word! block!] "Word or block of words to set each time."  
data            [series!] "The series to traverse (modified)."  
body            [block!] {Block to evaluate (return truthy value to remove).}

## repeat

### USAGE:

REPEAT 'word value body

### DESCRIPTION:

Evaluates body a number of times, tracking iteration count.

REPEAT is a native! value.

### ARGUMENTS:

'word           [word!] "Iteration counter; not local to loop."  
value           [integer! float!] "Number of times to evaluate body."  
body            [block!]

## return

### USAGE:

RETURN value

### DESCRIPTION:

Returns a value from a function.

RETURN is a native! value.

### ARGUMENTS:

value [any-type!]

## same?

### USAGE:

SAME? value1 value2

### DESCRIPTION:

Returns TRUE if two values have the same identity.

SAME? is a native! value.

### ARGUMENTS:

value1 [any-type!]

value2 [any-type!]

## set

### USAGE:

SET word value

### DESCRIPTION:

Sets the value(s) one or more words refer to.

SET is a native! value.

### ARGUMENTS:

word [any-word! block! object! any-path!] "Word, object, map path or block of words to set."

value [any-type!] "Value or block of values to assign to words."

### REFINEMENTS:

/any => Allow UNSET as a value rather than causing an error.

/case => Use case-sensitive comparison (path only).

/only => Block or object value argument is set as a single value.

/some => None values in a block or object value argument, are not set.

### RETURNS:

[any-type!]

## set-env

### USAGE:

SET-ENV var value

### DESCRIPTION:

Sets the value of an operating system environment variable (for current process).  
SET-ENV is a native! value.

### ARGUMENTS:

var	[any-string! any-word!] "Variable to set."
value	[string! none!] "Value to set, or NONE to unset it."

## shift

### USAGE:

SHIFT data bits

### DESCRIPTION:

Perform a bit shift operation. Right shift (decreasing) by default.  
SHIFT is a native! value.

### ARGUMENTS:

data	[integer!]
bits	[integer!]

### REFINEMENTS:

/left	=> Shift bits to the left (increasing).
/logical	=> Use logical shift (unsigned, fill with zero).

### RETURNS:

[integer!]

## sign?

### USAGE:

SIGN? number

### DESCRIPTION:

Returns sign of N as 1, 0, or -1 (to use as a multiplier).  
SIGN? is a native! value.

### ARGUMENTS:

number      [number! money! time!]

RETURNS:

[integer!]

## sine

USAGE:

SINE angle

DESCRIPTION:

Returns the trigonometric sine.

SINE is a native! value.

ARGUMENTS:

angle      [number!]

REFINEMENTS:

/radians      => Angle is specified in radians.

RETURNS:

[float!]

## size?

USAGE:

SIZE? file

DESCRIPTION:

Returns the size of a file content.

SIZE? is a native! value.

ARGUMENTS:

file      [file!]

RETURNS:

[integer! none!]

## square-root

USAGE:

SQUARE-ROOT value

DESCRIPTION:

Returns the square root of a number.

SQUARE-ROOT is a native! value.

ARGUMENTS:  
value [number!]

RETURNS:  
[float!]

## stats

USAGE:  
STATS

DESCRIPTION:  
Returns interpreter statistics.  
STATS is a native! value.

REFINEMENTS:  
/show => TBD:.  
/info => Output formatted results.

RETURNS:  
[integer! block!]

## strict-equal?

USAGE:  
STRICT-EQUAL? value1 value2

DESCRIPTION:  
Returns TRUE if two values are equal, and also the same datatype.  
STRICT-EQUAL? is a native! value.

ARGUMENTS:  
value1 [any-type!]  
value2 [any-type!]

## switch

USAGE:  
SWITCH value cases

DESCRIPTION:  
Evaluates the first block following the value found in cases.  
SWITCH is a native! value.

**ARGUMENTS:**

value [any-type!] "The value to match."  
cases [block!]

**REFINEMENTS:**

/default => Specify a default block, if value is not found in cases.  
case [block!] "Default block to evaluate."

## tangent

**USAGE:**

TANGENT angle

**DESCRIPTION:**

Returns the trigonometric tangent.  
TANGENT is a native! value.

**ARGUMENTS:**

angle [number!]

**REFINEMENTS:**

/radians => Angle is specified in radians.

**RETURNS:**

[float!]

## throw

**USAGE:**

THROW value

**DESCRIPTION:**

Throws control back to a previous catch.  
THROW is a native! value.

**ARGUMENTS:**

value [any-type!] "Value returned from catch."

**REFINEMENTS:**

/name => Throws to a named catch.  
word [word!]

## to-hex

### USAGE:

TO-HEX value

### DESCRIPTION:

Converts numeric value to a hex issue! datatype (with leading # and 0's).  
TO-HEX is a native! value.

### ARGUMENTS:

value [integer!]

### REFINEMENTS:

/size => Specify number of hex digits in result.  
length [integer!]

### RETURNS:

[issue!]

## to-local-file

### USAGE:

TO-LOCAL-FILE path

### DESCRIPTION:

Converts a Red file path to the local system file path.  
TO-LOCAL-FILE is a native! value.

### ARGUMENTS:

path [file! string!]

### REFINEMENTS:

/full => Prepends current dir for full path (for relative paths only).

### RETURNS:

[string!]

## transcode

### USAGE:

TRANSCODE src

### DESCRIPTION:

Translates UTF-8 binary source to values. Returns one or several values in a block.  
TRANSCODE is a native! value.



**ARGUMENTS:**

src [binary! string!] {UTF-8 input buffer; string argument will be UTF-8 encoded.}

**REFINEMENTS:**

/next => Translate next complete value (blocks as single value).  
 /one => Translate next complete value, returns the value only.  
 /prescan => Prescans only, do not load values. Returns guessed type.  
 /scan => Scans only, do not load values. Returns recognized type.  
 /part => Translates only part of the input buffer.  
 length [integer! binary!] "Length in bytes or tail position."  
 /into => Optionally provides an output block.  
 dst [block!]  
 /trace =>  
 callback [function! [event [word!] input [binary! string!] type [word! datatype!] line [integer!] token return: [logic!]]]

**RETURNS:**

[block!]

## try

**USAGE:**

TRY block

**DESCRIPTION:**

Tries to DO a block and returns its value or an error.  
TRY is a native! value.

**ARGUMENTS:**

block [block!]

**REFINEMENTS:**

/all => Catch also BREAK, CONTINUE, RETURN, EXIT and THROW exceptions.

## type?

**USAGE:**

TYPE? value

**DESCRIPTION:**

Returns the datatype of a value.  
TYPE? is a native! value.

**ARGUMENTS:**

value [any-type!]

**REFINEMENTS:**

/word => Return a word value, rather than a datatype value.

## union

**USAGE:**

UNION set1 set2

**DESCRIPTION:**

Returns the union of two data sets.

UNION is a native! value.

**ARGUMENTS:**

set1 [block! hash! string! bitset! typeset!]

set2 [block! hash! string! bitset! typeset!]

**REFINEMENTS:**

/case => Use case-sensitive comparison.

/skip => Treat the series as fixed size records.

size [integer!]

**RETURNS:**

[block! hash! string! bitset! typeset!]

## unique

**USAGE:**

UNIQUE set

**DESCRIPTION:**

Returns the data set with duplicates removed.

UNIQUE is a native! value.

**ARGUMENTS:**

set [block! hash! string!]

**REFINEMENTS:**

/case => Use case-sensitive comparison.

/skip => Treat the series as fixed size records.

size [integer!]

**RETURNS:**

[block! hash! string!]

## unless

### USAGE:

UNLESS cond then-blk

### DESCRIPTION:

If conditional expression is falsy, evaluate block; else return NONE.  
UNLESS is a native! value.

### ARGUMENTS:

cond	[any-type!]
then-blk	[block!]

## unset

### USAGE:

UNSET word

### DESCRIPTION:

Unsets the value of a word in its current context.  
UNSET is a native! value.

### ARGUMENTS:

word	[word! block!] "Word or block of words."
------	--

## until

### USAGE:

UNTIL body

### DESCRIPTION:

Evaluates body until it is truthy.  
UNTIL is a native! value.

### ARGUMENTS:

body	[block!]
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## uppercase

### USAGE:

UPPERCASE string

### DESCRIPTION:

Converts string of characters to uppercase.

UPPERCASE is a native! value.

ARGUMENTS:

string [any-string! char!] "Value to convert (modified when series)."

REFINEMENTS:

/part => Limits to a given length or position.  
limit [number! any-string!]

RETURNS:

[any-string! char!]

## value?

USAGE:

VALUE? value

DESCRIPTION:

Returns TRUE if the word has a value.  
VALUE? is a native! value.

ARGUMENTS:

value

RETURNS:

[logic!]

## wait

USAGE:

WAIT value

DESCRIPTION:

Waits for a duration in seconds or specified time.  
WAIT is a native! value.

ARGUMENTS:

value [number! time! block! none!]

REFINEMENTS:

/all => Returns all events in a block.

## while

USAGE:

WHILE cond body

DESCRIPTION:

Evaluates body as long as condition block evaluates to truthy value.  
WHILE is a native! value.

ARGUMENTS:

cond	[block!] "Condition block to evaluate on each iteration."
body	[block!] "Block to evaluate on each iteration."

## zero?

USAGE:

ZERO? value

DESCRIPTION:

Returns TRUE if the value is zero.  
ZERO? is a native! value.

ARGUMENTS:

value	[number! money! pair! time! char! tuple!]
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RETURNS:

[logic!]