Basic arithmetic functions

FUNCTIONS →

```
log2(x) # logarithms base 2 of x

log10(x) # logaritms base 10 of x

exp(x) # Exponential of x

cos(x) # Cosine of x

sin(x) # Sine of x

tan(x) #Tangent of x

acos(x) # arc-cosine of x

asin(x) # arc-sine of x

atan(x) #arc-tangent of x

abs(x) # absolute value of x

sqrt(x) # square root of x
```

Assigning values to variables

VARS → VAR | VAR,VAR
VAR → CHARACTER COMB
| ._COMB
| .CHARACTER COMB

COMB → . | _ | CHARACTER | D | COMB COMB | eps

EXP → VAL | ARITHM_EXP
A → VAR ASSIGN EXP
ASSIGN → <- | =
PRINT → VAR | print(VAR)
LIST → ls()

REMOVE → rm(VARS)

Basic data types

BASIC_TYPE → NUMERIC | CHAR | LOGICAL
NUMERIC →
BASIC_TYPE → LOGICAL | DOUBLE | INTEGER | NUMERIC | STRING | COMPLEX

COMPLEX → Di

LOGICAL → TRUE | FALSE | T | F

NUMERIC → INTEGER | DOUBLE
INTEGER → DL | DedL
d → 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9
D → dD | d
DOUBLE → D | .D | D.D | D.Ded

STRING → “CHAINE” | ‘CHAINE’
CHAINE → CHARACTER CHAINE | CHAINE\’CHARACTER | CHAINE\”CHARACTER |CHARACTER
CHARACTER → a | b | c … | z | A | … | Z

TYPE → typeof(BASIC_TYPE) | typeof(VAR)

TEST_TYPE → is.numeric(VAR) | is.character(VAR) | is.logical(VAR) | is.complex(VAR)

CONVERT → as.numeric(VAR) | as.character(VAR) | as.logical(VAR)
```
/*
 * Conversion d’un string to numeric est possible : returns NA (not available)
 */
```

Vectors

Matrices

Factors

Data frames