Math-c Documentation

Bitwise and other functions

y = and(a,b)

y= a & b

bitwise and

a -> integer value

b -> integer value.

returns

y -> bitwise and, if a or b are not integer, the decimals are truncated to do the operation.

~a

bitwise not

a -> scalar

y = or(a,b)

y= a | b

bitwise or

a -> integer value

b -> integer value.

returns

y -> bitwise or, if a or b are not integer, the decimals are truncated to do the operation.

y = xor(a,b)

y= a ^^ b

bitwise xor

a -> integer value

b -> integer value.

returns

y -> bitwise xor, if a or b are not integer, the decimals are truncated to do the operation.

a << b

shift a, b times to the left

a -> integer value

b -> integer value.

a >> b

shift a, b times to the right

a -> integer value

b -> integer value.

y = char(x)

convert the integer to characters

x -> real integer value or integer vector or matrix

returns

y -> a string, if is a matrix, return a vector of strings

y = clock()

convert the character to integers

x -> string value.

returns

y -> the time in seconds from the last time the clock function is called, except for the first call then return the time in seconds since the application was launched.

y = double(x)

convert the character to integers

x -> string value.

returns

y -> a scalar or integer vector.

y = fdim(a,b)

return the positive difference of a and b.

a -> real value or matrix.

b -> real value or matrix.

returns

y -> if a or b are matrices the operation is executed for each element in the same position of the other matrix.

y = gcd(a,b,..N)

variable number of parameters, calculate the greatest common divisor.

a -> integer value.

b -> integer value.

... -> integers values.

returns

y -> integer, calculate the greatest common divisor.

y = heronf(a,b,c)

heron formula, area of a triangle from its sides.

a -> value.

b -> value.

c -> value

returns

y -> area of triangle with sides a,b,c.

y = lcm(a,b,..N)

variable number of parameters, calculate the least common divisor.

a -> integer value.

b -> integer value.

... -> integers values.

returns

y -> integer, calculate the least common divisor.

y = lcm(a,b,..N)

variable number of parameters, calculate the least common divisor.

a -> integer value.

b -> integer value.

... -> integers values.

returns

y -> integer, calculate the least common divisor.

y = rand(a)
y = rand(a,b)

random number of uniform distribution between 0.0 to 1.0.

a -> num of rows.

b -> num of columns (default b=a).

returns

y -> a number or matrix with size a,b with numbers of uniform distribution between 0.0 to 1.0.

y = randi(num)
y = randi(num,a)
y = randi(num,a,b)

random integer number of uniform distribution between 0 to num.

num -> integer limit.

a -> num of rows.

b -> num of columns (default b=a).

returns

y -> a number or matrix with size a,b with integers numbers of uniform distribution between 0 to num.