assert() — Abort execution if false

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**Description**

assert(r) produces the error message “assertion is false” and aborts with error if \( r == 0 \).

asserteq(A, B) is logically equivalent to assert(A==B). If the assertion is false, however, information is presented on the number of mismatches.

**Syntax**

```plaintext
void assert(real scalar r)

void asserteq(transmorphic matrix A, transmorphic matrix B)
```

**Remarks and examples**

In the midst of complicated code, you know that a certain calculation must produce a result greater than 0, but you worry that perhaps you have an error in your code:

```plaintext
... assert(n>0) ...
```

In another spot, you have produced matrix A and know every element of A should be positive or zero:

```plaintext
... assert(all(A:>=0)) ...
```

Once you are convinced that your function works, these verifications should be removed. In a third part of your code, however, the problem is different if the number of rows \( r \) exceed the number of columns \( c \). In all the cases you need to use it, however, \( r \) will be less than \( c \), so you are not much interested in programming the alternative solution:

```plaintext
... assert(rows(PROBLEM) < cols(PROBLEM)) ...
```

Leave that one in.
Conformability

assert(r):
  r: 1 × 1
  result: void

asserteq(A, B):
  A: r_1 × c_1
  B: r_2 × c_2
  result: void

Diagnostics

assert(r) aborts with error if r == 0.

asserteq(A, B) aborts with error if A ≠ B.

Also see

[M-4] Programming — Programming functions