NAME

INFINITY, NAN, HUGE VAL, HUGE VALF, HUGE VALL - floating-point constants

SYNOPSIS

```
#define _ISOC99_SOURCE /* See feature_test_macros(7)
*/
#include <math.h>
INFINITY
NAN
HUGE_VAL
HUGE VALF
```

DESCRIPTION

HUGE VALL

The macro **INFINITY** expands to a *float* constant representing positive infinity.

The macro **NAN** expands to a *float* constant representing a quiet NaN (when supported). A *quiet* NaN is a NaN (not-a-number) that does not raise exceptions when it is used in arithmetic. The opposite is a *signaling* NaN. See IEC 60559:1989.

The macros HUGE_VAL, HUGE_VALF, HUGE_VALL expand to constants of types double, float and long double, respectively, that represent a large positive value, possibly positive infinity.

CONFORMING TO

C99.

AVAILABILITY

On a glibc system, the macro <code>HUGE_VAL</code> is always available. Availability of the <code>NAN</code> macro can be tested using <code>#ifdef NAN</code>, and similarly for <code>INFINITY</code>, <code>HUGE_VALF</code>, <code>HUGE_VALL</code>. They will be defined by <code><math.h></code> if <code>_ISOC99_SOURCE</code> or <code>_GNU_SOURCE</code> is defined, or <code>_STDC_VERSION_</code> is defined and has a value not less than 199901L.

SEE ALSO

fpclassify(3), math error(7)

COLOPHON

This page is part of release 3.74 of the Linux man-pages project. A description of the project, information about reporting bugs, and the latest version of this page, can be found at http://www.kernel.org/doc/man-pages/.

2007-07-26