

**NAME**

**modf**, **modff**, **modfl** - extract signed integral and fractional values from floating-point number

**LIBRARY**

Math Library (libm, -lm)

**SYNOPSIS**

```
#include <math.h>
```

*double*

```
modf(double value, double *iptr);
```

*float*

```
modff(float value, float *iptr);
```

*long double*

```
modfl(long double value, long double *iptr);
```

**DESCRIPTION**

The **modf**(), **modff**(), and **modfl**() functions break the argument *value* into integral and fractional parts, each of which has the same sign as the argument. It stores the integral part as a floating point number in the object pointed to by *iptr*.

**RETURN VALUES**

These functions return the signed fractional part of *value*.

**SEE ALSO**

frexp(3), ldexp(3), math(3)

**STANDARDS**

The **modf**(), **modff**(), and **modfl**() functions conform to ISO/IEC 9899:1999 ("ISO C99").