



Search: Go

Reference <ios> oct

Not logged in
[register](#) [log in](#)

C++

Information
Tutorials
Reference
Articles
Forum

Reference

C library:

Containers:

Input/Output:

<fstream>

<iomanip>

<ios>

<iosfwd>

<iostream>

<istream>

<ostream>

<sstream>

<streambuf>

Multi-threading:

Other:

<ios>

types:

basic_ios

fpos

ios

ios_base

io_errc

streamoff

streampos

streamsize

wios

wstreampos

manipulators:

boolalpha

dec

defaultfloat

fixed

hex

hexfloat

internal

left

noboolalpha

noshowbase

noshowpoint

noshowpos

noskipws

nounitbuf

nouppercase

oct

right

scientific

showbase

showpoint

showpos

skipws

unitbuf

uppercase

other functions:

istream_category

function

<ios> <iostream>

std::oct

ios_base& oct (ios_base& str);

Use octal base

Sets the basefield format flag for the *str* stream to oct.

When basefield is set to oct, integer values inserted into the stream are expressed in octal base (i.e., radix 8). For input streams, extracted values are also expected to be expressed in octal base when this flag is set.

The basefield format flag can take any of the following values (each with its own manipulator):

flag value	effect when set
dec	read/write integer values using decimal base format.
hex	read/write integer values using hexadecimal base format.
oct	read/write integer values using octal base format.

Notice that the basefield flag only affects the insertion/extraction of integer values (floating-point values are always interpreted in decimal base).

Notice also that no base prefix is implicitly prepended to the number unless the `showbase` format flag is set.

For standard streams, the basefield flag is set to `dec` on initialization.

Parameters

str

Stream object whose basefield *format flag* is affected.

Because this function is a manipulator, it is designed to be used alone with no arguments in conjunction with the *insertion* (<<) and *extraction* (>>) operations on streams (see example below).

Return Value

Argument *str*.

Example

```

1 // modify basefield
2 #include <iostream>      // std::cout, std::dec, std::hex, std::oct
3
4 int main () {
5     int n = 70;
6     std::cout << std::dec << n << '\n';
7     std::cout << std::hex << n << '\n';
8     std::cout << std::oct << n << '\n';
9     return 0;
10 }

```

Output:

```

70
46
106

```

Data races

Modifies *str*. Concurrent access to the same stream object may cause data races.

Exception safety

Basic guarantee: if an exception is thrown, *str* is in a valid state.

See also

<code>dec</code>	Use decimal base (function)
<code>hex</code>	Use hexadecimal base (function)
<code>ios_base::flags</code>	Get/set format flags (public member function)
<code>ios_base::setf</code>	Set specific format flags (public member function)

C++ Function

Free Answers to Your C++ Language Questions. Register Now!

● ○

