



Search:

Go

Not logged in

Reference

<istream>

istream

unset

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:

<istream>

class templates:

basic_istream

basic_istream

classes:

istream

istream

wistream

wistream

manipulators:

ws

istream

istream::istream

istream::~istream

member classes:

istream::sentry

member functions:

istream::gcount

istream::get

istream::getline

istream::ignore

istream::operator>>

istream::peek

istream::putback

istream::read

istream::readsome

istream::seekg

istream::sync

istream::tellg

istream::unset

non-member overloads:

operator>> (istream)

protected members:

istream::operator=

istream::swap

public member function

std::istream::unset

<istream> <iostream>

istream& unset();

Unget character

Attempts to decrease the current location in the stream by one character, making the last character extracted from the stream once again available to be extracted by input operations.

Internally, the function accesses the input sequence by first constructing a [sentry](#) object (with *noskipws* set to true). Then (if *good*), it calls [sungetc](#) on its associated *stream buffer* object (if any). Finally, it destroys the [sentry](#) object before returning.

C++98

C++11

?

If the *eofbit* flag is set before the call, the function fails (sets *failbit* and returns).

If the call to [sungetc](#) fails, the function sets the *badbit* flag. Note that this may happen even if the function is called right after a character has been extracted from the stream (depending on the internals of the associated *stream buffer* object).

Calling this function sets the value returned by [gcount](#) to zero.

Parameters

none

Return Value

The *istream* object (*this).

Errors are signaled by modifying the *internal state flags*:

flag	error
<i>eofbit</i>	-
<i>failbit</i>	The construction of sentry failed (such as when the <i>stream state</i> was not <i>good</i> before the call).
<i>badbit</i>	Either the internal call to sungetc failed, or another error occurred on the stream (such as when the function catches an exception thrown by an internal operation, or when no <i>stream buffer</i> is associated with the stream). When set, the integrity of the stream may have been affected.

Multiple flags may be set by a single operation.

If the operation sets an *internal state flag* that was registered with member *exceptions*, the function throws an exception of member type *failure*.

Example

```
1 // istream::unset example
2 #include <iostream>      // std::cin, std::cout
3 #include <string>        // std::string
4
5 int main () {
6     std::cout << "Please, enter a number or a word: ";
7     char c = std::cin.get();
8
9     if ( ( c >= '0' ) && ( c <= '9' ) )
10    {
11        int n;
12        std::cin.ungetc();
13        std::cin >> n;
14        std::cout << "You entered a number: " << n << '\n';
15    }
16    else
17    {
18        std::string str;
19        std::cin.ungetc();
20        getline (std::cin, str);
21        std::cout << "You entered a word: " << str << '\n';
22    }
23    return 0;
24 }
```

Possible output:

```
Please, enter a number or a word: 7791
You entered a number: 7791
```

● **Data races**

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

● **Exception safety**

Basic guarantee: if an exception is thrown, the object is in a valid state.
It throws an exception of member type *failure* if the resulting *error state flag* is not *goodbit* and member *exceptions* was set to throw for that state.
Any exception thrown by an internal operation is caught and handled by the function, setting *badbit*. If *badbit* was set on the last call to *exceptions*, the function rethrows the caught exception.

🔗 **See also**

istream::get	Get characters (public member function)
istream::putback	Put character back (public member function)