

public member function

std::istream::putback

<istream> <iostream>

istream& putback (char c);

Put character back

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 `sputbackc(c)` 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 `sputbackc` fails, the function sets the `badbit` flag. Note that this may happen even if `c` was indeed the last character 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

c

Character to be put back.
If this does not match the character at the put back position, the behavior depends on the particular `stream buffer` object associated to the stream:

- In `string buffers`, the value is overwritten for output stream buffers, but the function fails on input buffers.
- In `file buffers`, the value is overwritten on the intermediate buffer (if supported): reading the character again will produce `c`, but the associated input sequence is not modified.

Other types of `stream buffer` may either fail, be ignored, or overwrite the character at that position.

Return Value

The `istream` object (`*this`).

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

flag	error
<code>eofbit</code>	-
<code>failbit</code>	The construction of <code>sentry</code> failed (such as when the <code>stream state</code> was not <code>good</code> before the call).
<code>badbit</code>	Either the internal call to <code>sputbackc</code> failed, or another error occurred on the stream (such as when the function catches an exception thrown by an internal operation, or when no <code>stream buffer</code> 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

```
21     std::cout << "You entered a word: " << str << '\n';
22 }
23 return 0;
24 }
```

Possible output:

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

● **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::unget	Unget character (public member function)

[Home page](#) | [Privacy policy](#)

© cplusplus.com, 2000-2015 - All rights reserved - v3.1

[Spotted an error? contact us](#)