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function
std::**showpoint**   <ios> <iostream>

```
ios_base& showpoint (ios_base& str);
```
Show decimal point
Sets the showpoint format flag for the *str* stream.

When the showpoint format flag is set, the decimal point is always written for floating point values inserted into the stream (even for those whose decimal part is zero). Following the decimal point, as many digits as necessary are written to match the *precision* set for the stream (if any).

This flag can be unset with the noshowpoint manipulator. When not set, the decimal point is only written for numbers whose decimal part is not zero.

The precision setting can be modified using the precision member function.

For standard streams, the showpoint flag is **not set** on initialization.

Parameters

str
        Stream object whose *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

```cpp
1  // modify showpoint flag
2  #include <iostream>     // std::cout, std::showpoint, std::noshowpoint
3
4  int main () {
5    double a = 30;
6    double b = 10000.0;
7    double pi = 3.1416;
8    std::cout.precision (5);
9    std::cout <<   std::showpoint << a << '\t' << b << '\t' << pi << '\n';
10   std::cout << std::noshowpoint << a << '\t' << b << '\t' << pi << '\n';
11   return 0;
12 }
```

Possible output:

```
30.000  10000.  3.1416
30      10000   3.1416
```

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

noshowpoint	Do not show decimal point (function)
ios_base::flags	Get/set format flags (public member function)
ios_base::setf	Set specific format flags (public member function)
ios_base::unsetf	Clear specific format flags (public member function)