How to restore the float in C++?

(i.e. set the setting about float to default settings.)

[intro]

Activate the flag defaultfloat using the following statement.

std::hexfloat

[namespace]

std

[library]

<iostream>

[code]

#include <iostream>

using namespace std;

void PrintWithPrecision(int prec)

{

double a = 3.1415926534;

double b = 2006.0;

double c = 1.0e-10;

cout.precision(prec); // set the precision to 5 digit

cout << "hexfloat:"<<endl << std::hexfloat;

cout << a << endl << b << endl << c << endl;

cout <<"---------"<<endl;

cout << "defaultfloat:"<<endl << std::defaultfloat;

cout << a << endl << b << endl << c << endl;

cout <<"---------"<<endl;

}

int main ()

{

cout<<"Precision with 5."<<endl;

PrintWithPrecision(5);

cout<<"Precision with 4."<<endl;

PrintWithPrecision(4);

return 0;

}

[result]

Precision with 5.

hexfloat:

0x1.921fb543da7a8p+1

0x1.f58p+10

0x1.b7cdfd9d7bdbbp-34

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defaultfloat:

3.1416

2006

1e-10

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Precision with 4.

hexfloat:

0x1.921fb543da7a8p+1

0x1.f58p+10

0x1.b7cdfd9d7bdbbp-34

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defaultfloat:

3.142

2006

1e-10

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[ref]

<https://cplusplus.com/reference/ios/defaultfloat/>