How to print a number without different base in C++?

[intro]

We can set flags before print a number in C++ with the iostream “cout”.

For example, see the following code.

[namespace]

std

[library]

<iomanip>

[setting]

There are 3 different base we can set.

(1) dec

(2) hex

(3) oct

|  |  |  |
| --- | --- | --- |
| base | flag | Meaning |
| 10 | dec | decimal |
| 16 | hex | hexdecimal |
| 8 | oct | octal |

[code]

#include <iostream>

#include <iomanip>

using namespace std;

void PrintNumber(int number)

{

cout<<"You entered ";

cout << number <<endl;

cout<<"Its decimal is"<<endl;

cout << std::dec << std::setiosflags (std::ios::showbase);

cout << number << endl;

cout << std::resetiosflags(std::ios::showbase) << number << endl;

cout<<"Its hexdecimal is"<<endl;

cout << std::hex << std::setiosflags (std::ios::showbase);

cout << number << endl;

cout << std::resetiosflags(std::ios::showbase) << number << endl;

cout<<"Its octal is"<<endl;

cout << std::oct << std::setiosflags (std::ios::showbase);

cout << number << endl;

cout << std::resetiosflags(std::ios::showbase) << number << endl;

}

int main ()

{

int val;

cout<<"enter a value:"<<endl;

cin>>val;

PrintNumber(val);

return 0;

}

[input]

22

[result]

enter a value:

You entered 22

Its decimal is

22

22

Its hexdecimal is

0x16

16

Its octal is

026

26

[ref]

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