

C++ this Pointer

In C++ programming, **this** is a keyword that refers to the current instance of the class. There can be 3 main usage of this keyword in C++.

- It can be used to pass current object as a parameter to another method.
- It can be used to refer current class instance variable.
- It can be used to declare indexers.

C++ this Pointer Example

Let's see the example of this keyword in C++ that refers to the fields of current class.

```
#include <iostream>
using namespace std;
class Employee
{
public:
    int id;
    string name;
    float salary;

    Employee(int id, string name, float salary)
    {
        this->id = id;
        this->name = name;
        this->salary = salary;
    }

    void display()
    {
        cout<<id<<" "<<name<<" "<<salary<<endl;
    }
}
```

```
};  
int main()  
{  
    Employee e1 =Employee(101, "Sanjay", 890000);  
    Employee e2=Employee(102, "Nakul", 59000);  
    e1.display();  
    e2.display();  
}
```

```
#include <iostream>  
using namespace std;  
class MyClass  
{  
    private:  
        int value;  
    public:  
        void setValue(int value)  
        {  
            this->value = value; // accessing class member using "this" pointer  
        }  
        void printValue()  
        {  
            cout << "Value: " << this->value << endl; // accessing class member using  
            "this" pointer  
        }  
};
```

```
int main()
{
    MyClass obj;
    obj.setValue(42);
    obj.printValue();
}
```