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.

```cpp
#include <iostream>
using namespace std;
class Employee {
  public:
      int id; //data member (also instance variable)
      string name; //data member(also instance variable)
      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(void) {
    Employee e1 =Employee(101, "Sonoo", 890000); //creating an object of Employee
    Employee e2=Employee(102, "Nakul", 59000); //creating an object of Employee
    e1.display();
    e2.display();
    return 0;
}
```

Output:

```
101   Sonoo   890000
102   Nakul   59000
```
#include<iostream>

```cpp
using namespace std;

class A{

    int a;

    public:

        void setData(int a){

            this->a = a;

        }


        void getData(){

            cout<<"The value of a is "<<a<<endl;

        }

};

int main(){

    A a;

    a.setData(4);

    a.getData();

    return 0;

}
```