

## Lecture 6: C++ this pointer

### 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.

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### C++ this Pointer Example

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

```
1. #include <iostream>
2. using namespace std;
3. class Employee {
4.     public:
5.         int id; //data member (also instance variable)
6.         string name; //data member(also instance variable)
7.         float salary;
8.         Employee(int id, string name, float salary)
9.         {
10.            this->id = id;
11.            this->name = name;
12.            this->salary = salary;
13.        }
14.        void display()
15.        {
16.            cout<<id<<" "<<name<<" "<<salary<<endl;
17.        }
18.    };
19.    int main(void) {
```

```
20.     Employee e1 =Employee(101, "Sonoo", 890000); //creating an
        object of Employee
21.     Employee e2=Employee(102, "Nakul", 59000); //creating an o
        bject of Employee
22.     e1.display();
23.     e2.display();
24.     return 0;
25. }
```

Output:

```
101 Sonoo 890000
102 Nakul 59000
```