this pointer

```
class Student{
                  int rollno;
                  String name;
                  float fee;
               Student(int rollno,String name,float fee)
                  this.rollno=rollno;
                  this.name=name;
                  this.fee=fee;
                  //rollno=rollno1;
                  //name=name1;
                  //fee=fee1;
               }
           void display()
           System.out.println(rollno+" "+name+" "+fee);
}
class TestThis1{
                  public static void main(String args[])
                          Student s1=new Student(111,"ankit",5000f);
                          Student s2=new Student(112,"sumit",6000f);
                          s1.display();
                          s2.display();
               }
               Without using this pointer
               o/p
               0 null 0.0
               0 null 0.0
               Using this pointer
               o/p
               111 ankit 5000
               112 sumit 6000
```

Using the this Keyword

Within an instance method or a constructor, this is a reference to the *current object* — the object whose method or constructor is being called. You can refer to any member of the current object from within an instance method or a constructor by using this.

Using this with a Field

The most common reason for using the this keyword is because a field is shadowed by a method or constructor parameter.

```
For example, the Point class was written like this
public class Point {
  public int x = 0;
  public int y = 0;
  //constructor
  public Point(int a, int b) {
     x = a;
     y = b;
  }
but it could have been written like this:
public class Point {
  public int x = 0;
  public int y = 0;
  //constructor
  public Point(int x, int y) {
     this.x = x;
     this.y = y;
  }
}
```