

**Super**, is a keyword in java which is used to refer immediate parent class object. We can use super keyword to access the data member or field of parent class. It is used if parent class and child class have same fields.

Whenever you create the instance of subclass, an instance of parent class is created implicitly which is referred by super reference variable.

## Usage of Java super Keyword

1. super can be used to refer immediate parent class instance variable.
2. super can be used to invoke immediate parent class method.
3. super() can be used to invoke immediate parent class constructor.

Example:

```
public class StudentMain {

    public static void main(String[] args) {

        DayScholar ds=new DayScholar(23,"xyz" ,"5000","3000");
        ds.displayDetails();
    }
}

class Student{
    int studId ;
    String studName ;
    double examFee;
    public Student(int studId2,String studName2,double examFee2) {
        this.studId=studId2;
        this.studName=studName2;
        this.examFee=examFee2;
    }
    public void displayDetails() {
        System.out.println("Name: "+studId);
        System.out.println("Age: "+studName);
        System.out.println("exam fee: "+examFee);
    }
}

class DayScholar extends Student {
    double transportFee;
    public DayScholar(int studId2,String studName2,double examFee2,double
transportFee2) {
        super(studId2,studName2,examFee2);//use for super keyword
        this.transportFee=transportFee2;
    }
    public void display() {
        super.displayDetails();
    }
}
```

**This** , is a reference variable that refers to the current object. There can be a lot of usage of Java **this** keyword.

Some of common uses are listed below:-

1. this can be used to refer current class instance variable.
2. this can be used to invoke current class method (implicitly)
3. this() can be used to invoke current class constructor.
4. this can be passed as an argument in the method call.
5. this can be passed as argument in the constructor call.
6. this can be used to return the current class instance from the method.

Example:

```
class Student{
    int studId ;
    String studName ;

    public Student(int studId2,String studName2) {
        this.studId=studId2; //to refer current class instance
variable.
        this.studName=studName2;

    }
    public void displayDetails() {
        System.out.println("Name: "+studId);
        System.out.println("Age: "+studName);
    }
    public void displayDetails1() {
        this.displayDetails(); //to invoke current class method
(implicitly)

    }
}
```