



Super

The **super** keyword used to access the Data-Members of Immediate Parent Class From Child Class.

*When an Object of Child Class is Created at the same time instance of the Parent Class is Generated internally/implicitly

- 1.It is Used to access the Data Members of Immediate Parent Class.
- 2.**Methods, Variables** as well as **Constructors** can be accessed by the super keyword from the child class to its immediate parent class.

Super Methods :-

- 1.Super method can be Parameterized as well as Non-Parameterized.
- 2.It Reduces the Number of objects.
- 3.Its saves time and Memory.
- 4.Super Method should be mentioned inside a method block only.
- 5.Super method need not be the first line of code inside any other method.

Syntax: `super.method_name();`

Super Variables :- Using Super Keyword we can access the variable of Parent inside the child class.

Syntax: `super.variable_name;`



```
class A
{
    int val1=100;

    void method1(int a)
    {
        System.out.println("\nClass A:\n");
        System.out.println("Method--1\n");
        System.out.println("a is:"+a);
    }
}

class B extends A
{
    int val2=200;

    void method2(int a,int b,int c)
    {
        //super.method1(10);← This is a Comment
        System.out.println("\nClass B:\n");
        System.out.println("\nMethod--2\n");
        System.out.println("\nval1 from Class A: "+super.val1);
        // Immediate Parent Class Variable accessed through super keyword.
        System.out.println("a is:"+a);
        System.out.println("b is:"+b);
        System.out.println("c is:"+c);

        super.method1(10);// Parameterized Super Method,
    }
}

class C extends B
{
    void method3()//Non-Parameterized
    {
        //super.method2(10, 20, 30);

        System.out.println("\nClass C:\n");
        System.out.println("\nMethod--3\n");
        System.out.println("\nVal2 from Class B is:"+super.val2);
        System.out.println("\nMethod 3 of Class C\n");

        super.method2(10, 20, 30); //Need Not be the first Line of Code.
    }
}
```



```
    }  
  
}  
  
class D extends C  
{  
    void method4(int a,int b)  
    {  
        //super.method3();  
  
        System.out.println("\nClass D:\n");  
        System.out.println("\nMethod--4\n");  
        System.out.println("a is:"+a);  
        System.out.println("b is:"+b);  
  
        super.method3();  
    }  
}  
  
public class SuperKeyword  
{  
    public static void main(String[] args)  
    {  
        D obj=new D();  
  
        obj.method4(11, 23);  
    }  
}
```



Output :-

Class D:

Method--4

a is:11
b is:23

Class C:

Method--3

Val2 from Class B is:200

Method 3 of Class C

Class B:

Method--2

val1 from Class A: 100
a is:10
b is:20
c is:30

Class A:

Method--1

a is:10

continued in next file-



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