**Super keyword**

Whenever you create instance of Sub class, at that same time instance of Parent class created automatically. To refer that instance variable, we will use Super reference variable.

Usage of Java Super Keyword

1. Super can be used to refer parent class reference variable.
2. Super can be used to invoke immediate parent class method.
3. Super () can be used to invoke Parent class constructor.
4. Super Keyword can be used to refer parent class reference variable.

public class Animal {

String color ="Yellow";

public static void main(String[] args) {

Dog d = new Dog();

d.display();

}

}

public class Dog extends Animal{

String color = "Red";

void display(){

System.out.println("Dog Color is "+color);

System.out.println("Animal Color is " + super.color);

}

}

OUTPUT

Dog Color is Red

Animal Color is Yellow

1. **Super can be used to invoke Parent Class Method**

Super keyword is used when Sub Class method has same method of Parent Class

public class Animal {

String color ="Yellow";

void eat(){

System.out.println("Animal eating....");

}

public static void main(String[] args) {

Dog d = new Dog();

d.display();

d.eat();

}

}

public class Dog extends Animal{

String color = "Red";

void eat(){

super.eat();

System.out.println("Dog eating....");

}

void display(){

System.out.println("Dog Color is "+color);

System.out.println("Animal Color is " + super.color);

}

}

OUTPUT

Dog Color is Red

Animal Color is Yellow

Animal eating....

Dog eating....

1. **Super Keyword can also be used to invoke parent class constructor**

* Dog Class Inherits Property of animal class
* So all properties of Animal inherited by default
* To initialize all properties we used Parent constructor from child class using Super Keyword.

**import java.util.\*;**

**public class Animal {**

**int teeth;**

**String name;**

**public Animal (int teeth, String name)**

**{**

**this.teeth =teeth;**

**this.name =name;**

**}**

**void eat(){**

**System.out.println("Animal eating....");**

**}**

**public static void main(String[] args) {**

**Dog d = new Dog( 4, "scoopy","Brown");**

**d.bark();**

**}**

**}**

**public class Dog extends Animal{**

**String Color;**

**public Dog( int teeth , String name, String Color){**

**super(teeth,name);**

**this.Color = Color;**

**}**

**public void bark(){**

**System.out.println(" Dogs teeth " +teeth+" name: "+name+ " color : "+Color);**

**}**

**}**

**OUTPUT**

**Dogs teeth 4 name: scoopy color : Brown**