Chapter 10 Constructor in Inheritance in Java by Munawar

When a derived class is extended from the Base class the constructor of the Base class is executed first followed by the constructor of the derived class.

For the following hierarchy, the constructors are executed in the order 1 ---- > 2 ---- > 3

C1 Parent

C2 Child Constructors execute in top to bottom order!

C3 Grand Child

Constructor during constructor overloading

When there are multiple constructors in the parent class, the constructor without any parameters is called from the child class.

If we want to call the constructor with parameters from the parent class, we can use super class keyword.

Super (a, b);

Calls the constructor from the parent class which takes 2 variables

Source Code

```
import javax.swing.plaf.synth.SynthTextAreaUI;
import java.util.Scanner;
class Base{

    Base(){
        System.out.println("I am a Constructor :");
    }
    Base(int a){
        System.out.println("I am a constructor with value of "+a);
    }
}
```

```
class derived1 extends Base {

    derived1() {

        System.out.println("I am Derived constructor");
    }
    derived1(int a, int b){
        System.out.println("The value of is "+a+" The value of b is "+b);
    }

}

class childDerived extends derived1{
    childDerived(){
        System.out.println("I am chidDerived constructor:");
    }
    childDerived(int a, int b,int c){
        System.out.println("print "+a+b+c);
    }
}
public class Main {
    public static void main (String [] args) {

//        Base b = new Base();
        // in derived first run base constructor and than run derived
constructor
        derived1 d = new derived1();

        // constructor overloading
        Base b1=new Base(10);
        derived1 d2=new derived1(12,30);

        childDerived cd=new childDerived(2,4,3);

    }
}
```

```
}
```

Thank You