**Write a program to demonstrate Constructor chaining in Java.**

**Access super class constructor through child class and display the relevant statements of both.**

PROGRAM:

**public** **class** ConstructorChain{

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

Child sub = **new** Child();

Child sub1 = **new** Child("Test");

}

}

**class** Base{

String name;

**public** Base(){

**this**("");

System.***out***.println("constructor of Base class - no arg");

}

**public** Base(String name){//parameterised constructor

**this**.name = name;

System.***out***.println("Construtor of Base class - 1 arg");

}

}

**class** Child **extends** Base{

**public** Child(){

System.***out***.println("Constructor of Derived class - no arg");

}

**public** Child(String name){

**super**(name); //calling one argument constructor of super class

System.***out***.println("constructor Derived class - 1 arg");

}

}

**OUTPUT:**

Construtor of Base class - 1 arg

constructor of Base class - no arg

Constructor of Derived class - no arg

Construtor of Base class - 1 arg

constructor Derived class - 1 arg

1)Constructor chaining is the process of calling one constructor from another constructor with respect to current object.

2)Constructor chaining can be done in two ways

* **Within same class**: using **this()** keyword
* **From base class:**by using **super()** keyword to call constructor from the base class.

A sub class constructor’s task is to call super class’s constructor first. This ensures that creation of sub class’s object starts with the initialization of the data members of the super class. There could be any numbers of classes in inheritance chain. Every constructor calls up the chain till class at the top is reached.