

Multilevel inheritance:

Multilevel inheritance is a type of inheritance in which a derived class inherits from a base class that itself inherits from another base class.

CODE:

```
class A{
void methoda() {
    System.out.println("method of A class");
}
}
class B extends A{
    void methodb() {
        System.out.println("method of B class");
    }
}
class C extends B{
    void methodc() {
        System.out.println("method of C class");
    }
}
public class MultiLevelInheritance {
    public static void main(String[] args) {
        C obj=new C();
        obj.methodc();
        obj.methodb();
        obj.methoda();
    }
}
```

EXPLANATION:

Class Hierarchy

The code defines a class hierarchy with three classes: A, B, and C. The hierarchy is as follows:

- A (base class)
- B (intermediate class) extends A
- C (derived class) extends B

Methods

Each class has a single method:

- A has methoda()
- B has methodb()
- C has methodc()

Inheritance

The code demonstrates multilevel inheritance, where:

- B inherits from A and adds its own method methodb()
- C inherits from B and adds its own method methodc()

Main Class

The MultiLevelInheritance class contains the main() method, which:

1. Creates an instance of class C named obj
2. Calls the methods methodc(), methodb(), and methoda() on the obj instance

Output

The output of the program will be:

method of C class
method of B class
method of A class