

Multiple inheritance:

Multiple inheritance is a feature of object-oriented programming (OOP) where a class can inherit properties and methods from multiple parent classes.

WHY JAVA DONT SUPPORT MULTIPLE INHERITANCE?

Method Ambiguity:

When a class inherits multiple methods with the same name and signature from different parent classes, it creates method ambiguity. The compiler would not know which method to call, leading to errors.

CODE:

// Java does not support multiple inheritance directly

// However, we can use interfaces to achieve multiple inheritance

```
Interface animal {
    void eat();
}
interface Mammal {
    void walk();
}
class Dog implements Animal, Mammal {
    @Override
    public void eat() {
        System.out.println("Eating...");
    }
    @Override
    public void walk() {
        System.out.println("Walking...");
    }
    public void bark() {
        System.out.println("Barking...");
    }
}
public class MultipleInheritance{
    public static void main(String[] args) {
        Dog myDog = new Dog();
        myDog.eat();    // Output: Eating...
        myDog.walk();   // Output: Walking...
        myDog.bark();   // Output: Barking...
    }
}
```

Explanation:

1. Animal and Mammal are two interfaces that define methods eat() and walk(), respectively.
2. Dog is a class that implements both Animal and Mammal interfaces, inheriting their methods.
3. Dog also defines its own method bark()