9.Write a program in Java to resolve the diamond problem using OOPs' concepts

```
// Base interface
interface Animal {
    void eat();
}

// First parent interface
interface Herbivore extends Animal {
    void eatPlants();
}

// Second parent interface
interface Carnivore extends Animal {
    void eatMeat();
}

// Child class implementing both interfaces
class Omnivore implements Herbivore, Carnivore {
    @Override
    public void eat() {
        System.out.println("Omnivore eats everything.");
    }

    @Override
    public void eatPlants() {
        System.out.println("Omnivore eats plants.");
    }

    @Override
    public void eatMeat() {
```

```
        System.out.println("Omnivore eats meat.");
    }
}

public class Main {
    public static void main(String[] args) {
        Omnivore omnivore = new Omnivore();
        omnivore.eat();       // Calls eat() method from Animal interface
        omnivore.eatPlants();  // Calls eatPlants() method from Herbivore interface
        omnivore.eatMeat();    // Calls eatMeat() method from Carnivore interface
    }
}
```

OUTPUT:

```
Omnivore eats everything.
Omnivore eats plants.
Omnivore eats meat.
```