

## DAY -9 HOMEWORK

```
class Flower {  
    String name;  
    String color;  
    boolean hasFragrance;  
  
    public Flower(String name, String color, boolean hasFragrance) {  
        this.name = name;  
        this.color = color;  
        this.hasFragrance = hasFragrance;  
    }  
  
    public void displayDetails() {  
        System.out.println("Flower Name: " + name);  
        System.out.println("Color: " + color);  
        System.out.println("Has Fragrance: " + (hasFragrance ? "Yes" : "No"));  
    }  
}  
  
class Rose extends Flower {  
    boolean hasThorns;  
  
    public Rose(String color, boolean hasFragrance, boolean hasThorns) {  
        super("Rose", color, hasFragrance);  
        this.hasThorns = hasThorns;  
    }  
  
    @Override  
    public void displayDetails() {  
        super.displayDetails();
```

```
        System.out.println("Has Thorns: " + (hasThorns ? "Yes" : "No"));
    }
}
```

```
class Lily extends Flower {
    boolean isWaterPlant;

    public Lily(String color, boolean hasFragrance, boolean isWaterPlant) {
        super("Lily", color, hasFragrance);
        this.isWaterPlant = isWaterPlant;
    }

    @Override
    public void displayDetails() {
        super.displayDetails();
        System.out.println("Grows in Water: " + (isWaterPlant ? "Yes" : "No"));
    }
}
```

```
public class FlowerInheritanceDemo {
    public static void main(String[] args) {
        Rose rose = new Rose("Red", true, true);
        Lily lily = new Lily("White", true, true);

        System.out.println("---- Rose Details ----");
        rose.displayDetails();

        System.out.println("\n---- Lily Details ----");
        lily.displayDetails();
    }
}
```