This time, we'll create a Dog class and add a method that uses an if-else statement to determine a dog's mood based on its energy level.

**The Dog Class**

Create a new class in Eclipse and name it Dog. We'll give it a name, breed, and energyLevel. The energyLevel will be a number from 1 to 10. We'll also add a method called bark() which will use an if-else statement.

Java

// Dog.java

public class Dog {

// Properties

String name;

String breed;

int energyLevel; // On a scale of 1-10

// Method with if-else

public void bark() {

if (energyLevel > 7) {

System.out.println(name + " is barking excitedly! Woof woof!");

} else if (energyLevel > 4) {

System.out.println(name + " gives a calm bark. Ruff.");

} else {

System.out.println(name + " is too tired to bark. Zzz.");

}

}

}

In this code, the bark() method checks the dog's energyLevel.

* If energyLevel is greater than 7, it prints an excited message.
* If it's not greater than 7 but is greater than 4, it prints a calm message.
* If neither of those conditions is true, it prints a tired message. This if-else if-else structure lets the object behave differently based on its state (the value of energyLevel).

**Using the Dog Class and if-else**

Now, let's create a separate class with a main method to create Dog objects and see the if-else in action. Create a new class named DogPark.

Java

// DogPark.java

public class DogPark {

public static void main(String[] args) {

// Create an energetic dog object

Dog happyDog = new Dog();

happyDog.name = "Max";

happyDog.breed = "Golden Retriever";

happyDog.energyLevel = 9; // High energy

System.out.println(happyDog.name + " the " + happyDog.breed + " arrives at the park.");

happyDog.bark(); // This will trigger the first if condition

System.out.println("--------------------");

// Create a calm dog object

Dog calmDog = new Dog();

calmDog.name = "Buddy";

calmDog.breed = "Beagle";

calmDog.energyLevel = 5; // Medium energy

System.out.println(calmDog.name + " the " + calmDog.breed + " is relaxing on a bench.");

calmDog.bark(); // This will trigger the else if condition

System.out.println("--------------------");

// Create a tired dog object

Dog sleepyDog = new Dog();

sleepyDog.name = "Rocky";

sleepyDog.breed = "Bulldog";

sleepyDog.energyLevel = 2; // Low energy

System.out.println(sleepyDog.name + " the " + sleepyDog.breed + " just finished a long walk.");

sleepyDog.bark(); // This will trigger the final else condition

}

}

When you run DogPark.java, the output will demonstrate how the bark() method changes its behavior for each Dog object based on its unique energyLevel property. You are able to see a direct result of the if-else statement from each object. This is a simple but powerful example of how **objects can have dynamic behavior** controlled by their internal state and conditional logic.