Write a Java program to create a class called "Q Dog" with a name and breed attribute. Create two instances of the "Dog" class, set their attributes using the constructor and modify the attributes using the setter methods and print the updated values.

Sample Solution:

Java Code:

```
// Define the Dog class
public class Dog {
    // Declare a private variable to store the name of the dog
    private String name;
    // Declare a private variable to store the breed of the dog
    private String breed;
    // Constructor for the Dog class that initializes the name and breed va
    public Dog(String name, String breed) {
        // Set the name variable to the provided name parameter
        this.name = name;
        // Set the breed variable to the provided breed parameter
       this.breed = breed;
    }
    // Method to retrieve the name of the dog
    public String getName() {
        // Return the value of the name variable
        return name;
    }
    // Method to set the name of the dog
    public void setName(String name) {
        // Set the name variable to the provided name parameter
        this.name = name;
    }
    // Method to retrieve the breed of the dog
    public String getBreed() {
        // Return the value of the breed variable
        return breed;
    }
```

```
// Method to set the breed of the dog
public void setBreed(String breed) {
    // Set the breed variable to the provided breed parameter
    this.breed = breed;
}
```

The above class has two private attributes: 'name' and 'breed', and a constructor that initializes these attributes with the values passed as arguments. It also has getter and setter methods to access and modify these attributes.

```
// Define the Main class
                                                                      Copy
public class Main {
    // Define the main method which is the entry point of the program
    public static void main(String[] args) {
        // Create an instance of the Dog class with the name "Buddy" and br
        Dog dog1 = new Dog("Buddy", "Golden Retriever");
        // Create another instance of the Dog class with the name "Charlie'
        Dog dog2 = new Dog("Charlie", "Bulldog");
        // Print the name and breed of dog1 to the console
        System.out.println(dog1.getName() + " is a " + dog1.getBreed() + "
        // Print the name and breed of dog2 to the console
        System.out.println(dog2.getName() + " is a " + dog2.getBreed() + "
        // Print a message indicating that the breed of dog1 and the name of
        System.out.println("\nSet the new Breed of dog1 and new name of dog
        // Change the breed of dog1 to "Labrador Retriever"
        dog1.setBreed("Labrador Retriever");
        // Change the name of dog2 to "Daisy"
        dog2.setName("Daisy");
        // Print the updated name and breed of dog1 to the console
        System.out.println(dog1.getName() + " is now a " + dog1.getBreed()
        // Print the updated name and breed of dog2 to the console
        System.out.println(dog2.getName() + " is now a " + dog2.getBreed()
    }
```

In the above example code, we create two instances of the "Dog" class, set their attributes through the constructor, and print their name and breed using the getter methods. We also modify the attributes using the setter methods and print the updated values.

Sample Output:

```
Buddy is a Golden Retriever.
Charlie is a Bulldog.

Set the new Breed of dog1 and new name of dog2:
Buddy is now a Labrador Retriever.
Daisy is now a Bulldog.
```

Flowchart: