Lab 1: Classes and Objects Introduction

In this lab, you'll apply your knowledge of classes to build a Java program that utilizes an Animal class, complete with properties, getters, and setters. After completing the class, you'll instantiate your Animal object and use getters and setters to display its properties.

Exercise

Requirements

Create an Animal class with the following private properties: numLegs, topSpeed, isEndangered, and name.

Complete the constructor for the Animal class.

Create all getters and setters for the Animal properties.

Instantiate an Animal object and display some of its properties.

Use the setter methods to modify some of the animal's properties and show the modified animal.

Bonus: Include additional methods in your Animal class that return a formatted String using the class properties.

Classes

You'll need to complete the constructor, getters, and setters in Animal.java file. You also need a Main.java file.

Output

Your program should return the text below, following the requirements above:

The Elephant has a top speed of 25 mph.

The Lion has a top speed of 50 mph.

Test Your Code

Test if your Animal constructor works correctly with proper parameters.

Test your Animal class getters.

Test your Animal class setters.