**8.2- Exercise – pen**

**Task**

1. Identify and fix issues in the provided Pen class code to make it functional.
2. Add appropriate methods to set and retrieve values for manufacturer, color, and type to ensure encapsulation.
3. Refactor the CentralClass to set the pen's properties correctly and call methods as intended.

**Hints**

* The Pen class contains syntax and logical issues:
  + The class name pen should be capitalized as Pen to follow Java conventions.
  + Some methods return incorrect attributes (e.g., getColor() returns manufacturer).
  + The setManufacturer method has an incomplete switch statement syntax.
* Ensure that the class variables are accessed and modified through getters and setters for proper encapsulation.
* Update CentralClass to use pen.setColor(), pen.setType(), etc., correctly.

**Explanation**

Encapsulation is a core principle of object-oriented programming that helps protect class properties from unintended access and modification. By fixing the Pen class, you will practice proper attribute access and learn to debug common issues like typos and incorrect logic.