

Here are 10 Java questions on Encapsulation, the private keyword, and getter/setter methods:

1. Create a class `Person` with private variables `name` and `age`. Provide public getter and setter methods for both variables.
2. Write a class `BankAccount` with a private variable `balance`. Add a method to deposit an amount and a method to withdraw an amount. Include appropriate getters and setters.
3. Create a class `Student` with private fields `rollNo` and `marks`. Write getter and setter methods and a method to display student details.
4. Explain why using private variables and public getters/setters is considered good practice in Java.
5. Write a class `Employee` with private fields `id`, `name`, and `salary`. Create getter and setter methods for all fields. Include logic in the setter to prevent negative salary.
6. Create a class `Car` with a private variable `speed`. Implement getter and setter methods. In the setter, ensure speed cannot exceed 200 km/h.
7. Write a class `Book` with private fields `title` and `author`. Use getter and setter methods to manipulate the data.
8. Create a class `Rectangle` with private fields `length` and `width`. Write getter and setter methods and a method to calculate area.
9. Explain what would happen if variables in a class are public instead of private. Give an example.
10. Write a class `Circle` with private variable `radius`. Write getter and setter methods and a method to calculate the circumference.