**Assignment Report**

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**🔹 1. Introduction**

In this assignment, I implemented the **Builder Design Pattern** in Java by creating a Car class as the product.  
The **Builder Pattern** helps to construct complex objects step by step, making the code more readable, flexible, and maintainable.

**🔹 2. Objective**

* Demonstrate how the Builder Pattern works.
* Show practical usage of the pattern through a simple Java program.

**🔹 3. Product: Car**

The Car class has the following attributes:

* **model** → e.g., "Sports Car", "Family Car"
* **engine** → e.g., "V8", "Hybrid"
* **seats** → e.g., 2, 5

**🔹 4. Builder Class**

The inner Builder class contains methods:

* setModel(String model)
* setEngine(String engine)
* setSeats(int seats)
* build() → returns a Car object

These methods allow step-by-step construction of a Car object.

**Conclusion**

This project demonstrates how the **Builder Pattern** simplifies object creation by separating the construction process from the representation.  
The final code is easy to read, maintain, and extend, making it a good example of clean and structured programming in Java.