

Clean Code Principles

1) Keep It Simple

- Write code that is **easy to read and understand**.
- Avoid redundant or unnecessary code.
- Methods should have a **single responsibility** (do one thing and do it well).

2) Organization

- Use **clear and descriptive names** for variables and methods.
- Follow **Java naming conventions**:
 - Classes: PascalCase (e.g., OrderService)
 - Methods/variables: camelCase (e.g., calculateTotal)
- Minimize **unused or wildcard imports**.
- Organize classes logically (e.g., group by feature or responsibility).
- Add comments **sparingly** and only when necessary (e.g., to explain non-obvious logic).

3) Avoid

- **Long methods**: Break them into smaller, focused methods.
- **Large classes**: Split into smaller classes with distinct responsibilities.
- **Deeply nested loops**: Refactor with helper methods or use data streams.

4) Error Handling

- Always **catch and handle specific exceptions**