

# Real-Time Reusability Suggestions

## Concept:

- Develop a tool that integrates with the development environment (IDE) to provide real-time suggestions for making code more modular and reusable.
- When a developer creates a new function, the tool analyzes the function and suggests common code segments that can be extracted for reuse.

## Implementation Flow:

### 1. IDE Integration:

- Create a plugin for popular IDEs (e.g., Visual Studio Code, PyCharm) that hooks into the code writing process.

### 2. Function Analysis:

- When a new function is written, the tool analyzes its structure and logic.
- Identify code segments that could be common across multiple functions.

### 3. Suggestion Engine:

- Based on the analysis, provide suggestions to the developer for refactoring the code into reusable components.
- Highlight potential reusable segments and suggest creating separate functions or modules.

### 4. Developer Feedback:

- Allow developers to accept or reject suggestions.

