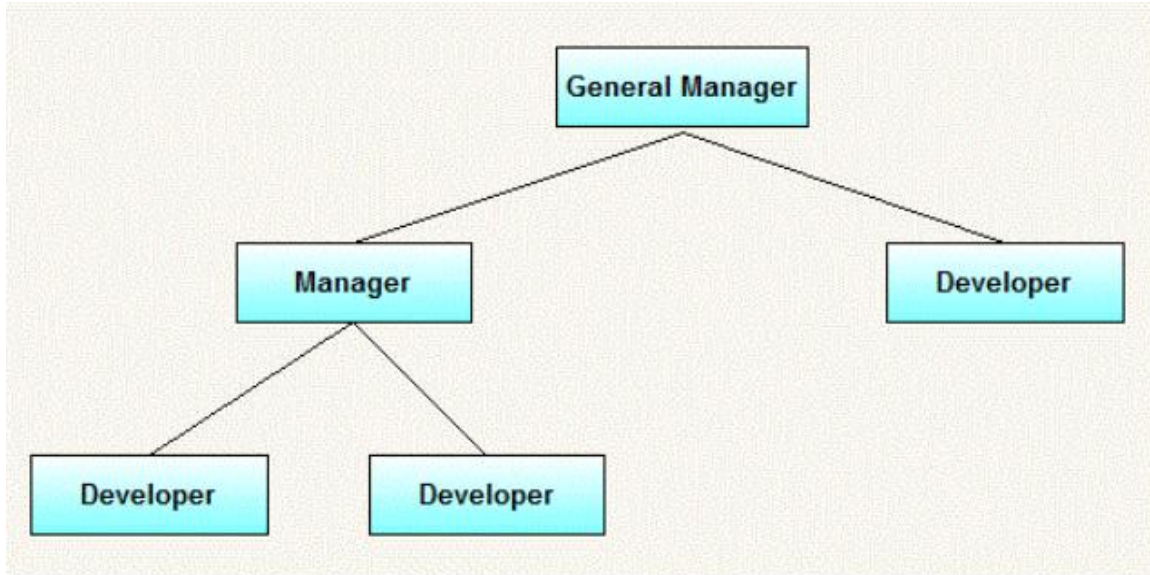
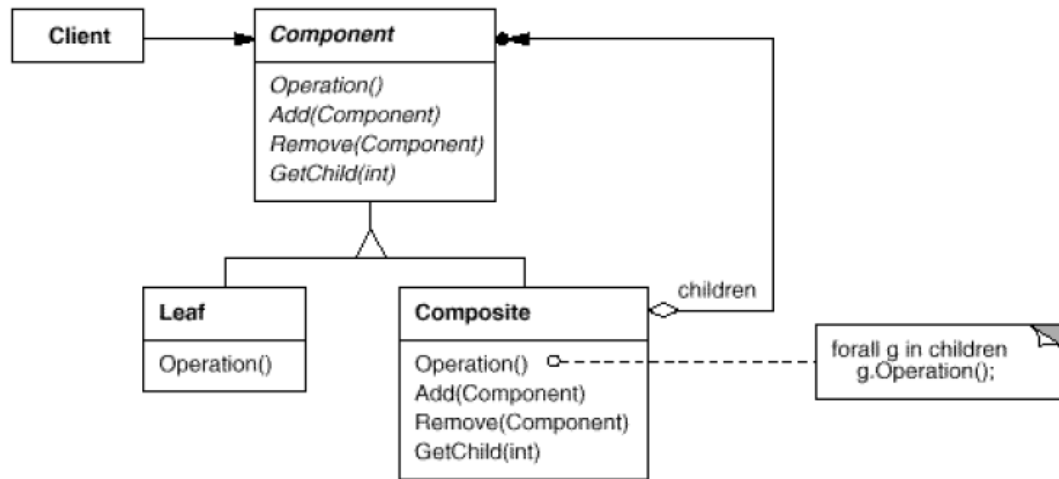


- Problem: In a small organization, there are 5 employees. At top position, there is 1 general manager. Under general manager, there are two employees, one is manager and the other is developer and further manager has two developers working under him. We want to print names and salaries of all employees from top to bottom.



1. The diagram above is a structure illustration of this organization. To represent the organization in a class diagram, how many classes would there be? Draw the class diagram.
2. We want to print out the names and salaries of everyone from top to bottom, say from a client class. How would the client class complete this task?

The **Composite Pattern** is shown in the class diagram below.



3. Try to explain what's going on with this pattern.
4. Revisit question 1. Following this pattern, what would the class diagram look like? Map your classes (and necessary new ones) to the classes in this pattern.
5. Write some pseudo code that enables the Client to print out the information.
6. Benefits and drawbacks?
7. Is this pattern "mutually exclusive" with Factory/Abstract Factory Pattern? Why so or why not?