

## 7 basic principles

### ① Divide & Conquer

- Break problems into small, manageable tasks

### ② Encapsulation & Modularity

- Each object knows how to solve its task and has the info it needs

### ③ Public Interface

- Present a clear public interface that determines how other objects will be used

### ④ Information Hiding

- Shield its users from unnecessary details of how it performs its role

### ⑤ Generality

- Designed to solve a kind of task rather than a singular task

### ⑥ Extensibility

- To carry out more specialized tasks

### ⑦ Abstraction

- Focus only on those attributes that are essential for solving a particular problem

## Benefits of OOP

- ① Save development time and cost by reusing code
- ② Easier debugging