

# Defensive programming (I)

## Adopting good programming practices

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### **Modularity**

- ➔ Have separate modules for separate functionalities
- ✓ Easier to find security flaws when components are independent

### **Encapsulation**

- ➔ Limit the interaction between the components
- ✓ Avoid wrong usage of the components

### **Information hiding**

- ➔ Hide the implementation
- ⦿ Black box model does not improve security

# Defensive programming (2)

## Being security aware programmer

- ✓ Check the inputs, even between components that belongs to the same application (mutual suspicion)
- ✓ Be “fault tolerant” by having a consistent policy to handle failure (managing exceptions)
- ✓ Reuse known and widely used code by using design patterns and existing libraries