### Inheritance exercises

#### Object Oriented Programming



Version 1 - April 2018

© Andrea Marcelli 2018









# andrea.marcelli@polito.it



## **Book Shop**

- Your program defines two classes: one for ordinary books (Book), and another for the special editions (SpecialEdition).
   Each Book has an associated SpecialEdition
- Book represents a book that holds a title, author and price.
   The class defines getters and setters methods
- SpecialEdition represents a special edition that holds the same properties as any Book, but its price is always 30% higher. The class defines getters and setters methods
- Use the Scanner to read user inputs and add three books in the Main class



### **Bank Accounts**

- Your program defines four classes corresponding to four types of bank accounts: basic, premium, gold, platinum
- Basic: fee: 10 or 10%, no interest, no minimum balance
- Premium: fee: 10 or 10%, 1.5% interest, 100 minimum balance (or 3 % of penalty)
- Gold: fee: 10 or 10%, 4% interest, 250 minimum balance (or 5 % of penalty)
- Platinum: fee: 10 or 10%, 7% interest, 500 minimum balance (or 7 % of penalty)
- Each account has an associated name, surname, initial balance and credit cards transactions
- The BankManager class keeps track of all the available bank accounts and compute the balance, fees, interests and penalties at the end of the month

