

1. Create the necessary classes for managing a museum:
  - a. We are going to store the information about *Artworks* (abstract class), of each artwork we will store *author*, *owner*, *name* and *year* of creation.
  - b. There will be 2 types of artwork: *paintings* and *sculptures*. From the sculptures we will store the material.
  - c. We will store the name of the *Author*.
  - d. Create a *Main* class to test the classes with a menu that allow the user to introduce the artworks and authors and to show the information about them.
  
2. Create a class called *House* with:
  - a. An attribute *area*.
  - b. A constructor to initialize this attribute.
  - c. A method called *toString* that returns "I am a house, and my area is X m2".
  - d. The getter and the setter for the attribute area.
  - e. A *Door*. Each door will have:
    - i. An attribute called *color*
    - ii. A method *toString* that returns "I am a door, my color is X".
    - iii. A getter and a setter for the attribute color.
  - f. A getter for the attribute *door*.

Create a class called *SmallApartment* a subclass of *House*, with an area of 50 m2 that will be initialized in the constructor.

Create another class called *Person* with an attribute *name*. Each *person* will have a *house*. The method *toString* of a person will return its name, the information of its house and the information of the door of the house.

Create a *main* class where you have to create a *smallApartment*, a *person* who lives in it and then show the information of the person.
  
3. Create:
  - a. An interface called *IMeasurable* with a method called *getSize()*
  - b. An interface called *IDrawable* with a method *Draw()*.
  - c. An abstract class called *GeometricalFigure* with the attributes *x1,y1* (left superior corner), *x2,y2* (right inferior corner). It must have a constructor to initialize all the attributes and another constructor without parameters that will reuse the other constructor. You will have to create also an abstract method *show* that shows the type of shape that it is and its size.
  - d. 2 classes that inherits from *GeometricalFigure* called *Square* and *Triangle* that will implement the 2 interfaces..