END SECTION – PRACTICE – PART 1

Your task here is to create the Great Robbery application.

USE the private keyword as many times as you can!

1. ## Create a Person class.
   - **the class should be abstract – it's a base class for Criminal and Detective class**
   - **Don't forget the constructor**

   Fields:

   - **String name**
   - **String nickname**
   - **int yearOfBorn**
   - **String expertIn**
   - **Item array (*hint: Item[] items*)**

   Functions:

   - **printBioData – prints out all the fields(name, nickname, yearOfBorn, expertIn and items – use for loop to print out the items)**
   - **getName – returns the name of the person**
   - **getNickname – returns the nickname of the person**

2. Create an Item class

- **It'll be used to store the items for Buildings and Persons**

Fields:

- **String name**
- **double value – the item's value in dollars**

Functions:

- **getName – returns the name of the item**
- **getValue – returns the value of the item**

3. Create a Criminal class

- **Extends the Person class**
- **A constructor will be needed where the super constructor is called**

Fields:

- **int SUCCESS_PERCENTAGE – it'll be used to decide whether their mission is successful or not - *it should be final and static***

Functions:

- **printBioData – override the original version and also use it with super.printBioData(), before that print out the following text: "Criminal person:"**

4. Create a Detective class

- **Extends the Person class**
- **A constructor will be needed where the super constructor is called**

Fields:

- **int SUCCESS_PERCENTAGE – it'll be used to decide whether the detective can catch the criminals or not - *it should be final and static***

Functions:

- **printBioData – override the original version and also use it with super.printBioData(), before that print out the following text: "Detective:"**

5. Create a Building class

- **This class will be used by criminals to steal items**

Fields:

- **String name**
- **Item array (*hint: Item[] items*)**

Functions:

- **getName – returns the name of the building**
- **getItems – returns the items array**

6. Create a City class

- **This class will store the buildings in an array(Bank, Mansion, Post Office and Supermarket)**
- **Create an array of buildings with 4 element is the constructor (public City()).**

Fields:

- **Buildings array (*hint: Building[] building = new Building[4];*) Create the following building objects with the following items in them:**
    - **Bank**
        - **Letter opener - $1.5**
        - **Stamp - $2.5**
    - **Mansion**
        - **Pair of fancy shoes - $25**
        - **Broken glass – $0.1**
    - **Post Office**
        - **Letter to Jenny - $1.5**
        - **Pencil - $2.0**
    - **Supermarket**
        - **A loaf of bread - $2.5**
        - **A bag of tea - $6.5**

Functions:

- **getBuildings – returns the array of buildings**