**Exercise 1:**



***MobileDevice*** class***:***

* + Attributes:
    - ***brand***: the brand of the mobile device.
    - ***speed:*** the speed of the mobile device.
    - ***storage***: the storage capacity of the mobile device.
    - ***price***: the price of the mobile device.
  + Methods:
* ***MobileDevice(brand: string, storage: int, speed: double)***: constructor
* ***calculatePrice(* ):** this method calculates and returns the price of the mobile device. The price is calculated as follows:
  + ***For Smart Phone****: price = 1300 + number of sim cards \* 150*
  + ***For Tablet:*** *price = 1300 \* storage+ screen size \* 50*
* ***getBrand():***this method returns the brand of the mobile device.

***SmartPhone*** class

* + Attributes:
    - ***nbSim***: the number of SIM cards.
  + Methods:
* ***SmartPhone (brand: string, storage: int, speed: double, nbSim: int)***: constructor.
* ***getNbSim():***this method returns the number of sim cards supported by the smart phone.

***Tablet*** class:

* + Attributes:
    - ***screenSize***: the screen size of the tablet.
  + Methods:
* ***Tablet (brand: string, storage: int, speed: double, screenSize: int)***: constructor.

***Company*** class***:***

* + Attributes:
    - ***name***: the name of the company.
  + Methods:
* ***Company(name: string, size: int)***: constructor
* ***addMobile(m:MobileDevice*):** this method adds the mobile device ***m*** to the company. It returns the string “Successfully added” if the mobile device ***m*** is added. Otherwise, it returns “Cannot be added”.
* ***countMobileDevices(b:string):*** this method counts and returns the number of mobile devices having the brand ***b***.
* ***averagePricesOfSmartPhones():*** this method calculates and returns the average price of the smart phones only.
* ***averagePricesOfSmartPhones(nbS:int, b:string):*** this method calculates and returns the average price of the smart phones of the brand ***b*** and having ***nbSim*** greater than ***nbS***.
* ***saveSmartPhones(sp:SmartPhone[], nbS:int):*** this method saves the smart phones having ***nbSim*** greater or equal to ***nbS*** into the array ***sp***, and returns the number of saved objects.

**QUESTION**: Translate into Java code the class ***MobileDevice***, the class ***SmartPhone,*** and the class ***Company.***