CENG 344 LAB WORK 2

Write a Java program that has 3 classes: House, Room and Resident. House Class should store rooms and resident like shown in the class diagram. When House class and Room class has a composition relationship, House and Resident classes have an aggregation relationship. So House class should have copy constructor that makes deep copy to store rooms. In house class, there exists a function "AddResident" that adds Resident to house if there is not any.

House	Resident	Room
- room1: Room - room2: Room - person: resident - totalm2: int	-name : string -lastname : string	-m2 : int balcony: string
	+ resident(): constructor + getResident(): void + printResident(): void	+ getRoom() : void +printRoom() : void +getM2() : int +setM2() : int +getBalcony() : string +setBalcony() : string
+ House() ~House() +House(House obj) +AddResident(resident person): void +int getTotalM2(); int +calculateTotalm2(): void		
		3.2

Explanations of functions:

House:

- GetTotalm2(): returns totalm2 of the house.
- calculateTotalM2(): Prints total m2 of the house after summing up m2 of all rooms
- AddResident(resident person): Adds Resident to house if there is not any.

Resident:

- getResident(): Taking user input for resident information.
- PrintResident(): Printing resident information.

Room:

- getRoom(): Taking user input for Room information.
- printRoom(): Printing room information.
- getM2(): returns m2 of the room.
- setM2(): Setting the m2 of the house.
- getBalcony(): returns balcony information of the room(yes or no)
- SetBalcony(): Setting balcony information of room.

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```
-----Resident Information-----
name : Serdar
last name :Taşel
-----Room Information-----
Enter m2 of room: 65
Does room has a balcony : yes
-----Room Information-----
Enter m2 of room: 58
Does room has a balcony : no
m2: 65,balcony: yes
m2: 58,balcony: no
total m2 of the house: 123
Resident Name : Serdar, Resident Last name: Taşel
Copy constructor
-----Resident Information-----
name : Çağhan
last name :Özaydın
-----Room Information-----
Enter m2 of room: 56
Does room has a balcony : yes
-----Room Information-----
Enter m2 of room: 53
Does room has a balcony : no
m2: 56,balcony: yes
m2: 53,balcony: no
total m2 of the house: 109
Resident Name : Çağhan, Resident Last name: Özaydın
```