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Inheritance

Solutions for those exercises.¹

Questions

1. What is the keyword used to call the constructor from the base class?
 - this**.
 - the name of the base class.
 - base**
 - over**
 - inherits**

Problem

Consider the following diagram:

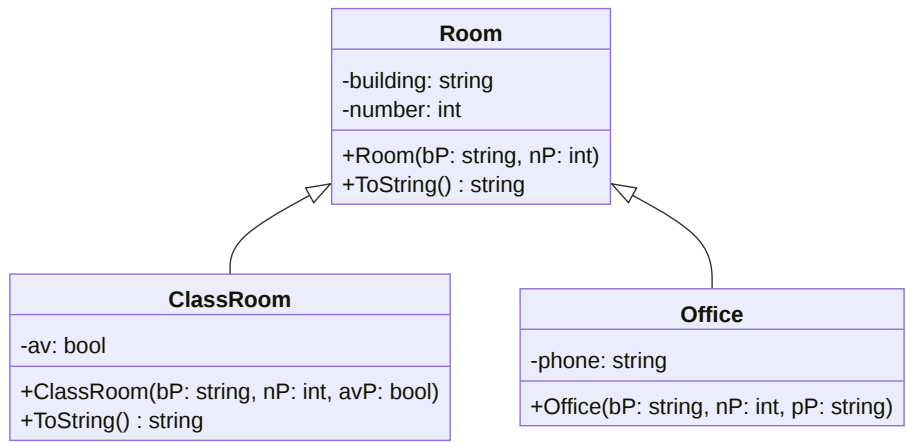


Figure 1: A UML diagram for the Room Classroom class (text version²)

Suppose you are given an implementation of the Room class, such that

¹<https://princomp.github.io/solutions/oop/inheritance>

```
Room test = new Room("UH", 243);  
Console.WriteLine(test);
```

displays

UH 243

1. Write an implementation of the Classroom class. Your ToString method should display the room's building and number, in addition to whether it has AV set-up.
2. Write a SameBuilding static method to be placed inside the Room class such that

```
Office test1 = new Office("UH", 127, "706 737 1566");  
ClassRoom test2 = new ClassRoom("UH", 243, true);  
Office test3 = new Office("AH", 122, "706 729 2416");  
Console.WriteLine(Room.SameBuilding(test1, test2));  
Console.WriteLine(Room.SameBuilding(test2, test3));
```

Would display "true" and "false".