Write a class that meets the following specifications.   
You will not write all the accessors and mutators for the class variables - just write the ones listed below.  
  
The class will be called *Elevator* and will help a program control the elevators in a building.

1. An elevator has a *passengerCount* variable that keeps track of how many people are in the elevator.
2. An elevator has a *currentFloor* variable that keeps track of which floor the elevator is currently on.
3. An elevator has a *maxFloor* variable that keeps track of the highest floor it can be on.
4. An elevator has a *speed* variable that keeps track of the speed of the elevator. Positive values mean the elevator is going up. Negative values mean the elevator is going down. Zero means it is stopped.
5. A default constructor that sets the *currentFloor* to 1, the *maxFloor* to 1, and the other class variables to zero.
6. Another constructor that allows all four class variables to be set.
7. Write an accessor method for the *passengerCount* variable.
8. Write an accessor method for the *currentFloor* variable.
9. Write a mutator method for the *speed* variable that accepts a new speed as an argument. The mutator method should make sure that the speed of the elevator can never be below -5 or above 5.
10. Write a method named *floorUp* that will increase the current floor of the elevator by 1 as long as the elevator is not already on the maximum floor. If the elevator is on the maximum floor, print out an error.
11. Write a method named *floorDown* that will decrease the current floor of the elevator by 1 as long as the elevator is not already on the 1st floor. If the elevator is on the 1st floor, print out an error.
12. Write a method named *isStopped* that will return true or false depending on the speed of the elevator.
13. Write a method named *addPassengers* that has one parameter - the number of passengers entering the elevator. The *passengerCount* of the elevator should change as necessary. This method should only allow zero or more passengers to enter the elevator.  
    (assume removePassenger is also in the class but you do not have to write it)
14. Write a method named *removePassengers* that has one parameter - the number of passengers leaving the elevator. The *passengerCount* of the elevator should change as necessary. This method should only allow a valid number of people to leave the elevator (if 6 people try to leave when there are only 2 people in the elevator, then NO changes should be made and you can print out an error).
15. Write a method in the class so that the following code would print out the current floor and passenger count of the elevator as shown.  
    Elevator e1 = new Elevator(5, 2, 25, 0);  
    System.out.println(e1); would print out “Floor 2, 5 Passengers”