```java
/*
    Chapter 5:  Programming Assignment 4
    Programmer: Mike Brown
    Date:       March 30, 2009
    Filename:   Rooms.java
    Purpose:    This is an external class called by the Reservations.java
    program.
                It's constructor method recieves the number of nonsmoking and
                smoking rooms
                and then creates an array of empty rooms. The bookRoom()
                method accepts a
                boolean value and returns a room number.
*/

public class Rooms
{
    //declare class variables
    int numSmoking;
    int numNonSmoking;
    boolean occupied[];

    public Rooms (int non, int sm)
    {
        //construct an array of boolean values equal to the total number of
        rooms
        occupied = new boolean[sm + non];
        for(int i=0; i<(sm+non); i++)
            occupied[i] = false; //set each occupied room to false ot empty
        //initialize the number of smoking and non smoking rooms
        numSmoking = sm;
        numNonSmoking = non;
    }

    public int bookRoom(boolean smoking)
    {
        int begin, end, roomNumber = 0;

        if (!smoking)
        {
            begin = 0;
            end = numNonSmoking;
        }
        else
        {
            begin = numNonSmoking;
            end = numSmoking + numNonSmoking;
        }

        for(int i=begin; i<end; ++i)
        {
            if(!occupied[i]) //if room is not occupied
            {
                occupied[i] = true;
                roomNumber = i + 1;
                i = end;//to exit loop
            }
        }
        return roomNumber;
    }
}
```