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import java.util.ArrayList;
import java.util.Collections;
import java.util.Random;

public class ArrayListExercises {

    public static void main(String[] args) {

        // You do not need to handle the User Interface (UI).
        // Instead you can run the JUnit test cases found in
        // ArrayListExercisesTests.java
        bulgarianSolitaire(10);
    }

    /**
     * Removes all of the strings of even length from the given list
     *
     * @param listOfStrings the list of Strings (list can be empty)
     * @return the given list with all even length strings removed
     */
    public static ArrayList<String> removeEvenLength(ArrayList<String> listOfStrings) {
        for (int i = 0; i < listOfStrings.size(); i++) {
            if (listOfStrings.get(i).length() % 2 == 0) {
                listOfStrings.remove(i);
                i--;
            }
        }

        return listOfStrings; // This return statement should be last
    }

    /**
     * Moves the minimum value in the list to the front, otherwise preserving the
     * order of the elements
     *
     * @param listOfIntegers the list of Integers (list cannot be empty)
     * @return the given list with the minimum value in the front (zeroth element)
     */
    public static ArrayList<Integer> minimumToFront(ArrayList<Integer> listOfInts) {
        int min = listOfInts.get(0);
        for (int num : listOfInts) {
            if (num < min) {
                min = num;
            }
        }
    }
}

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    }
    listOfInts.remove(new Integer(min));
    listOfInts.add(0, min);
    return listOfInts; // This return statement should be last
}

/**
 * Removes all elements from the given list whose values are in the range min
 * through max (inclusive). If no elements in range min-max are found in the
 * list, the list's contents are unchanged. If an empty list is passed, the list
 * remains empty. Assume min < max.
 *
 * @param listOfInts the list of Integers (list can be empty)
 * @param min        the minimum value in the range
 * @param max        the maximum value in the range
 * @return the given list with the range min-max removed
 */
public static ArrayList<Integer> filterRange(ArrayList<Integer> listOfInts, int min, int max)
{
    for (int i = 0; i < listOfInts.size(); i++) {
        if (listOfInts.get(i) <= max && listOfInts.get(i) >= min) {
            listOfInts.remove(i);
            i--;
        }
    }
    return listOfInts; // This return statement should be last
}

/**
 * Models/simulates the game of Bulgarian Solitaire.
 *
 * @param numCards the number of cards to start with; n must be a triangular
 *                 number (a triangular number is a number that can be written
 *                 as the sum of the first n positive integers).
 */
public static void bulgarianSolitaire(int numCards) {

    // Check if given number of cards is triangular
    int n = (int) Math.sqrt(2 * numCards);
    if (n * (n + 1) / 2 != numCards) {
        System.out.println(numCards + " is not triangular");
        return;
    }
    ArrayList<Integer> piles = new ArrayList<Integer>();

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int range = numCards;
Random randy = new Random();
int num = 0;
while (range > 0) {
    num = randy.nextInt(range) + 1;
    range -= num;
    piles.add(num);
} // adds cards

boolean didConverge = false;
if (numCards == 1) {
    didConverge = true;
}
while (!didConverge) {
    for (int i = 0; i < piles.size(); i++) {
        if (piles.get(i) == 0) {
            piles.remove(i);
            i--;
        } else {
            piles.set(i, piles.get(i) - 1);
        }
    }
    piles.add(piles.size());
    piles.sort(null);
    System.out.println(piles);

    for (int j = 1; j < piles.size(); j++) {
        if (piles.size() == n && piles.get(j) - 1 == piles.get(j - 1)) {
            didConverge = true;
        } else {
            didConverge = false;
            break;
        }
    }
}
System.out.print("TADA");
}
}

```