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public static void bulgarianSolitaire(int numCards) {

    Random r = new Random();
    // 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> groups = new ArrayList <> ();
    int start = numCards;
    while (start > 0) {
        int g = r.nextInt(start) + 1;
        start -= g;
        groups.add(g);
    }
    ArrayList <Integer> answer = new ArrayList <> ();
    int i = 1;
    int counter = 0;
    while (counter < numCards) {
        counter += i;
        answer.add(i);
        i += 1;
    }
    while (!answer.equals(groups)) {
        for(int x = 0; x < groups.size(); x++) {
            if (x == groups.size() - 1) {
                System.out.println(groups.get(x) + " ");
            }
            else {
                System.out.print(groups.get(x) + " ");
            }
        }
        int newGroup = 0;
        for (int j = 0; j < groups.size(); j++) {
            groups.set(j, groups.get(j) - 1);
            newGroup += 1;
        }
        groups.add(newGroup);
        int x = 0;
        while (x < groups.size()) {
            if (groups.get(x) == 0) {
                groups.remove(x);
            }
            else {
                x += 1;
            }
        }
    }
}

```