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import java.util.ArrayList;

import java.util.Random;

public class BugarianSolitaire {

    public static void bulgarianSolitaire(int numCards) {

        Random pile = new Random();

        Random card = new Random();

        int numPiles = pile.nextInt(numCards)+1;

        int k = 1;

        int cards = numCards;

        int nCards = numCards;

        int amtCards = 0;

        // 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;

        }

        boolean config = false;

        ArrayList<Integer> piles = new ArrayList<Integer>();

        for(int c = 1; c < numPiles; c++) {

            if(nCards==0) {

                break;

```

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    }

    amtCards = card.nextInt(nCards) + 1;

    if(nCards >= amtCards) {
        piles.add(amtCards);
        nCards -= amtCards;
    }

    else if (nCards== 0) {
        break;
    }

    else if (amtCards > nCards) {
        piles.add(nCards);
        break;
    }
}

if (nCards > 0) {
    piles.add(nCards);
}

System.out.println(piles);

ArrayList <Integer> end = new ArrayList<Integer>();

while(cards>=0) {
    end.add(k);
    cards -= k;
    k++;
    if(cards==0) {
        break;
    }
}

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        }  
    }  
    ArrayList <Integer> empty = new ArrayList<Integer>();  
    empty.add(0);  
    while (config==false) {  
        for(int i=0; i<piles.size(); i++) {  
            piles.set(i, piles.get(i)-1);  
        }  
        piles.add(piles.size());  
        piles.removeAll(empty);  
        System.out.println(piles);  
        if(piles.containsAll(end)) {  
            config=true;  
            System.out.println("Solitaire over");  
        }  
    }  
}  
}
```