

### Requirements

- number of players: 1+
- Win condition: Combined weight of pebble == 100
- White bags: A,B,C
  - empty
- Black bags: X,Y,Z
  - full

### Black bags

- number of pebbles in each bag  $\geq 3 * (\text{number of players})$
- pebble weights  $\geq 0 :: \text{Int}$

### Rules:

1. each player selects a random black bag
2. each player takes 10 pebbles from that bag
3. if weight  $\neq 100$ 
  - 3.1 discard a single pebble to a white bag
  - 3.2 select a new black bag at random
    - 3.21 if bag == empty  
repeat 3.2
  - 3.3 take a single pebble from this bag
  - 3.4 repeat until someone wins

### Discard rules

1. Pebbles drawn from X discarded to A
2. Pebbles drawn from Y discarded to B
3. Pebbles drawn from Z discarded to Z

### What if black bags get empty

1. If black bag X is empty
  - fill all pebbles from white bag A into X
2. If black bag Y is empty
  - fill all pebbles from white bag B into Y
3. If black bag Z is empty
  - fill all pebbles from white bag C into Z

### Java conditions

1. Pebbles drawn at **random**
2. Players act as **concurrent threads**
3. Threading commences before step 1
4. Players are implemented as **nested classes** inside a PebbleGame application
5. Drawing and discarding are **atomic actions**

## Timetable

10/11 - 15/11

- Implement **black bags** and **white bags**
- Implement **Players classes**
- Implement all the **threading**

16/11 - 19/11

- Implement **drawing/discarding methods**

20/11

- clean up code
- add comments
- test code
- **paper report**

21/11

- submission