Hints for Card Game

- What parts of a monster card, are important to our computation?
  - Power?
  - Exact/relative position in the hand?
  - The adjacent cards on the left/right?
- In the game, we often remove cards in the middle.
  - We can store the **exact** position of each card in the hand (e.g. 10th from left). After a card removal, all following cards on the right are shifted forward 1 place. Is this bulk-position update costly?
  - What do we need the exact position for, when printing out the final answer?
  - Is there a cheaper way? Do we actually need the **exact** position? Do we need to spend time shifting?
- We can go round $1 \to 2 \to 3 \to \ldots$. Do we care about **every single** round?
  - Which ones do we care about?
  - What's the **next/upcoming** one we care about?
  - Are all 'important' rounds known immediately from the input? Can we realise halfway that there are 'newly important' rounds we care about?
- In round k, we want to find the first pair of cards with power k, repeatedly. Here, we want to know the list of positions, of the power-k cards.
  - At the start of the game, do we immediately know their exact positions?
  - During round k, we want to remove the leftmost pair of power-k cards. What kind of ordering do we want, on the 'list of positions'?
  - Then, we immediately reintroduce a power-$2k$ card.
  - What operations do we want here?
- We want to go in some order of rounds. Then in each round, we go in some order of cards in the hand. Can we **combine** these orders?
- When do we know to stop?
- Will we encounter any overflow issues with our datatypes?
  - What are the extreme input values (according to the constraints)?
  - What are the extreme **intermediate** values (during our computation)?