2558. Take Gifts From the Richest Pile

My Submissions (/contest/weekly-contest-331/problems/take-gifts-from-the-richest-pile/submissions/) Back to Contest (/contest/weekly-contest-331/)

User Accepted:	11403
User Tried:	12386
Total Accepted:	11706
Total Submissions:	18864
Difficulty:	Easy

You are given an integer array `gifts` denoting the number of gifts in various piles. Every second, you do the following:

- Choose the pile with the maximum number of gifts.
- If there is more than one pile with the maximum number of gifts, choose any.
- Leave behind the floor of the square root of the number of gifts in the pile. Take the rest of the gifts.

Return *the number of gifts remaining after* `k` *seconds.*

Example 1:

```
Input: gifts = [25,64,9,4,100], k = 4
Output: 29
Explanation:
The gifts are taken in the following way:
- In the first second, the last pile is chosen and 10 gifts are left behind.
- Then the second pile is chosen and 8 gifts are left behind.
- After that the first pile is chosen and 5 gifts are left behind.
- Finally, the last pile is chosen again and 3 gifts are left behind.
The final remaining gifts are [5,8,9,4,3], so the total number of gifts remaining is 29.
```

Example 2:

```
Input: gifts = [1,1,1,1], k = 4
Output: 4
Explanation:
In this case, regardless which pile you choose, you have to leave behind 1 gift in each pile.
That is, you can't take any pile with you.
So, the total gifts remaining are 4.
```

Constraints:

- $1 <= gifts.length <= 10^3$
- $1 <= gifts[i] <= 10^9$
- $1 <= k <= 10^3$

Discuss (https://leetcode.com/problems/take-gifts-from-the-richest-pile/discuss)

JavaScript

```
const pickGifts = (a, k) => {
    let pq = new MaxPriorityQueue({ compare: (x, y) => y - x }), res = 0;
    for (const x of a) pq.enqueue(x);
    while (k--) {
       let cur = pq.dequeue();
       pq.enqueue(Math.sqrt(cur) >> 0);
    }
    while(pq.size()) res += pq.dequeue();
    return res;
};
```

Custom Testcase | Use Example Testcases

Run | Submit

Submission Result: Accepted (/submissions/detail/891835381/) | More Details > (/submissions/detail/891835381/)

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