Token (Easy)

**Time Limit:** 1.0s  **Memory Limit:** 256M

This problem is the easy version of the Token (Hard) problem. The easy version of the problem doesn't have the variable $K$.

Ada wants to buy $N$ different kinds of products. She is going to buy $i$th product $a_i$ times. The owner of the wholesale store offers Ada, a great plan. Here's the plan:

The store owner gives Ada $2^N$ points. Ada will choose the unit price of each product, and it will be a positive integer. Selecting $X$ ($1 \leq X \leq N$, $X \in Z^+$) as the unit price for a product, will cost Ada $2^{(N-X)}$ points. Ada can use her points as she wishes, provided that these rules are followed.

What is the minimum total cost Ada should pay to buy all the products she needs?

**Input**

- The first line contains 1 integer:
  - $2 \leq N \leq 10^5$ (Number of different kinds of products Ada wants to buy)
- The second line contains $N$ integers:
  - $1 \leq a_i \leq 10^5$ (Amount of product $i$ Ada wants to buy)

**Output**

1 positive integer (minimum price to pay)

**Example**

Input:

```
7
3 10 3 5 21 8 15
```

Output:

```
165
```

**Explanation**
- Ada has a total of $2^7 = 128$ points.
  - unit price for 1st product($a_i = 3$) was chosen as 4. $2^{7-4} = 8$ points has been used. 120 left.
  - unit price for 2nd product($a_i = 10$) was chosen as 3. $2^{7-3} = 16$ points has been used. 104 left.
  - unit price for 3rd product($a_i = 3$) was chosen as 4. $2^{7-4} = 8$ points has been used. 96 left.
  - unit price for 4th product($a_i = 5$) was chosen as 3. $2^{7-3} = 16$ points has been used. 80 left.
  - unit price for 5th product($a_i = 21$) was chosen as 2. $2^{7-2} = 32$ points has been used. 48 left.
  - unit price for 6th product($a_i = 8$) was chosen as 3. $2^{7-3} = 16$ points has been used. 32 left.
  - unit price for 7th product($a_i = 15$) was chosen as 2. $2^{7-2} = 32$ points has been used. 0 left.

- $3 \cdot 4 + 10 \cdot 3 + 3 \cdot 4 + 5 \cdot 3 + 21 \cdot 2 + 8 \cdot 3 + 1 \cdot 2 = 165$