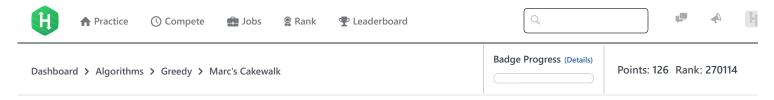
15/11/2017 HackerRank



Marc's Cakewalk



Problem Submissions Leaderboard Discussions Editorial

Marc loves cupcakes, but he also likes to stay fit. He eats n cupcakes in one sitting, and each cupcake i has a calorie count, c_i . After eating a cupcake with c calories, he must walk at least $2^j \times c$ (where j is the number cupcakes he has already eaten) miles to maintain his weight.

Given the individual calorie counts for each of the n cupcakes, find and print a *long integer* denoting the minimum number of miles Marc must walk to maintain his weight. Note that he can eat the cupcakes *in any order*.

Input Format

The first line contains an integer, n, denoting the number of cupcakes.

The second line contains n space-separated integers describing the respective calorie counts of each cupcake, $c_0, c_1, \ldots, c_{n-1}$.

Constraints

- $1 \le n \le 40$
- $1 \le c_i \le 1000$

Output Format

Print a long integer denoting the minimum number of miles Marc must walk to maintain his weight.

Sample Input 0

3 1 3 2

Sample Output 0

11

Explanation 0

Let's say the number of miles Marc must walk to maintain his weight is miles. He can minimize miles by eating the n=3 cupcakes in the following order:

- 1. Eat the cupcake with $c_1=3$ calories, so $miles=0+(3\cdot 2^0)=3$.
- 2. Eat the cupcake with $c_2=2$ calories, so $miles=3+(2\cdot 2^1)=7$.
- 3. Eat the cupcake with $c_0 = 1$ calories, so $miles = 7 + (1 \cdot 2^2) = 11$.

We then print the final value of *miles*, which is 11, as our answer.

f ⊌ in

Submissions: 12614

15/11/2017 HackerRank

Max Score:15
Difficulty: Easy

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More

Current Buffer (saved locally, editable) $\ \mathscr{V} \ \mathfrak{O}$ Java 7 \Diamond 1 ▼ import java.io.*; 2 import java.util.*; 3 import java.text.*; import java.math.*; import java.util.regex.*; 7 ▼ public class Solution { 8 9 ▼ public static void main(String[] args) { 10 Scanner in = new Scanner(System.in); int n = in.nextInt(); 11 12 ▼ int[] calories = new int[n]; for(int calories_i=0; calories_i < n; calories_i++){</pre> 13 ▼ calories[calories_i] = in.nextInt(); 14 ▼ 15 16 // your code goes here 17 } 18 } 19 Line: 1 Col: 1 **1** Upload Code as File Test against custom input Run Code Submit Code

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