

How Many Sub Sets?

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We have a set A of positive integers with cardinality N ($|A| = N$, remember that the cardinality of a set is the total of different elements it has). You want to find out how many subsets of size two have a sum of their elements less than or equal to S .

For example, if you have the following set $A = \{6, 5, 1, 4, 2, 3\}$ and $S = 7$, then there is a total of **9** subsets of size two whose sum of its elements is less than or equal to **7**, said subsets are: $\{6, 1\}$, $\{5, 1\}$, $\{5, 2\}$, $\{1, 4\}$, $\{1, 2\}$, $\{1, 3\}$, $\{4, 2\}$, $\{4, 3\}$ and $\{2, 3\}$.

Your mission, if you decide to accept it, is to count the total of subsets of size two that have a sum of their elements less than or equal to S .

Input Format

The input of the problem consists of a single test case. The test case contains three lines, the first line contains two positive integer numbers n ($1 \leq n \leq 5 \cdot 10^5$) and q ($1 \leq q \leq 10$), which represent respectively the cardinality of the set A and the total of queries that will be made on the set A . The next line contains exactly n space-separated positive integer numbers $A_1, A_2, A_3, \dots, A_n$ ($1 \leq A_i \leq 10^8$, for $1 \leq i \leq n$), it is obviously guaranteed that the n elements of the set A are different. The next line contains exactly q space-separated positive integer numbers $S_1, S_2, S_3, \dots, S_q$ ($1 \leq S_j \leq 2 \cdot 10^8$, for $1 \leq j \leq q$), for the queries.

Constraints

$$1 \leq n \leq 5 \cdot 10^5$$

$$1 \leq q \leq 10$$

$$1 \leq x \leq 10^8$$

$$1 \leq S \leq 2 \cdot 10^8$$

Output Format

Your program should print q lines, each of them containing a single value that represents the total result of subsets of size two that the sum of their elements is less or equal to S .

Sample Input 0

```
6 3
6 5 1 4 2 3
7 8 12
```

Sample Output 0

9
11
15

f t in

Submissions: 168

Max Score: 100

Difficulty: Medium

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☆☆☆☆☆

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C

```
1 #include <stdio.h>
2 #include <string.h>
3 #include <math.h>
4 #include <stdlib.h>
5
6 int main() {
7
8     /* Enter your code here. Read input from STDIN. Print output to STDOUT */
9     return 0;
10 }
```

Line: 1 Col: 1

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