

Problem G – Gato currency converter.

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Jaime's country has been invited to join a new group of countries which was recently formed (and they have accepted to join them). They call themselves the "International Competitive Programming Countries" (ICPC). This group has brought many new things to Jaime's country, among them, a new currency called gato.

Some people have had difficulties adopting this new currency, including Jaime. He must change all the prices of his products in his little shop. The thing is, he is not that good at currency conversion.

It is a well known fact that five pesos (peso is Jaime's country old currency) equal one gato, or at least that's what Jaime remembers. However, he does not know how to convert quantities less than 5 pesos to gato. That's why he has decided that, after converting a price to gato, according to the rule he remembers, if there are pesos remaining, he will convert them to one gato, and he will continue doing so until he remembers how to do conversion between pesos and gato.

Help Jaime determine the new prices of some of the products he is selling in his shop.

Input

The first line of the input contains an integer C ($1 \leq C \leq 10^5$), representing the number of products in Jaime's shopping mall (yes, it may not be that "little"). The second line contains C integers separated by a space C_i ($1 \leq C_i \leq 10^6$, $1 \leq i \leq C$), representing the prices in pesos of the products Jaime's shopping mall has for sale. The next line contains an integer Q ($1 \leq Q \leq 10^5$), representing the number of queries Jaime is about to ask concerning his products price conversion. Each of the last Q lines contain a single integer number q_j ($1 \leq q_j \leq C$), representing that Jaime needs your help with the conversion of the price of the q_j^{th} product to gato currency.

Output

For each query in the input, output a line containing the price in gato of the product in Jaime's store queried.

Sample input 1	Sample output 1
4	1
1 5 6 25	5
4	2
1	1
4	
3	
2	