A. Devu, the Singer and Churu, the Joker

time limit per test
1 second
memory limit per test
256 megabytes
input
standard input
output
standard output

Devu is a renowned classical singer. He is invited to many big functions/festivals. Recently he was invited to "All World Classical Singing Festival". Other than Devu, comedian Churu was also invited.

Devu has provided organizers a list of the songs and required time for singing them. He will sing n songs, ith song will take ti minutes exactly.

The Comedian, Churu will crack jokes. All his jokes are of 5 minutes exactly.

People have mainly come to listen Devu. But you know that he needs rest of 10 minutes after each song. On the other hand, Churu being a very active person, doesn't need any rest.

You as one of the organizers should make an optimal schedule for the event. For some reasons you must follow the conditions:

- The duration of the event must be no more than d minutes;
- Devu must complete all his songs;
- With satisfying the two previous conditions the number of jokes cracked by Churu should be as many as possible.

If it is not possible to find a way to conduct all the songs of the Devu, output -1. Otherwise find out maximum number of jokes that Churu can crack in the grand event.

Input

The first line contains two space separated integers n, d ($1 \leq n \leq 100$; $1 \leq d \leq 10000$). The second line contains n space-separated integers: $t1, t2, ..., tn$ ($1 \leq ti \leq 100$).

Output

If there is no way to conduct all the songs of Devu, output -1. Otherwise output the maximum number of jokes that Churu can crack in the grand event.

Examples

input
```
3 30
2 2 1
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output
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5
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input
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3 20
2 1 1
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output
```
-1
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Note

Consider the first example. The duration of the event is 30 minutes. There could be maximum 5 jokes in the following way:

- First Churu cracks a joke in 5 minutes.
- Then Devu performs the first song for 2 minutes.
- Then Churu cracks 2 jokes in 10 minutes.
- Now Devu performs second song for 2 minutes.
- Then Churu cracks 2 jokes in 10 minutes.
- Now finally Devu will perform his last song in 1 minutes.

  Total time spent is $5 + 2 + 10 + 2 + 10 + 1 = 30$ minutes.

  Consider the second example. There is no way of organizing Devu's all songs. Hence the answer is -1.