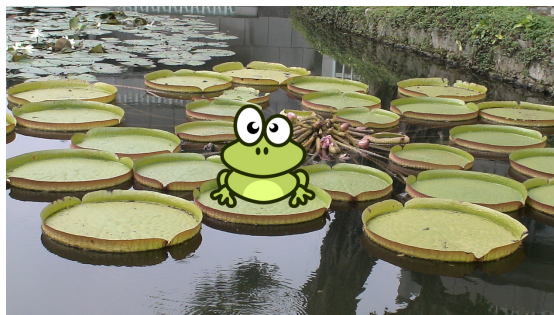




Lilypads

Frog Juliet and her friends are hanging out together by their favorite lake. Juliet wants to show off and has prepared a show for them. Juliet will cross the lake by jumping on some of the n lilypads, which are evenly distributed on a straight line. It will look like she's bouncing on water! You have to be very precise in order not to fall in the water and get wet: the lilypads are slippery, some are smaller than others and have weird shapes.



This can be impractical, but Juliet is a very clever frog and did not come unprepared.

That's why she came to the lake a few days ago and gave to each lilypad a rating, depending on how difficult she thinks that it is to land on this lilypad without falling. She also trained and found a value c such that for every lilypad, if the difficulty rating of this lilypad is bigger than c she can't land on it without falling into the water.

Landing on a difficult lilypad is more complicated, but it's also way more impressive! That's why Juliet wants the sum of the difficulty ratings of the lilypads on which she jumps to be as high as possible. There are, however, a few limitations: first, if she has jumped on the i -th lilypad, she does not want to jump on the $(i + 1)$ -th lilypad or on the $(i + 2)$ -th lilypad. The reason is that jumping between two very close lilypads is not that impressive: it looks like walking on water, and some say that even humans are capable of that. The second limitation is that Juliet wants to go in one direction on the lake, without jumping backwards at any moment. This would reduce her speed and make the whole performance a little bit less interesting.

She now wants to choose a subset of the n lilypads on which she will jump, such that she can jump on exactly these lilypads and both obey these rules and maximize the total difficulty of the show, so that she impresses her friends as much as possible. Can you help her determine on which lilypads she should jump?

Remember that she cannot jump on any lilypad that has difficulty rating bigger than c .

Input

- The first line of the input contains two numbers n and c , the number of lilypads and the maximal difficulty that Juliet can manage.
- On the second line follow n space-separated integers a_0, \dots, a_{n-1} , where a_i is the difficulty rating for the $(i + 1)$ -th lilypad.

Output

Print one integer s , the maximal sum of difficulties that you can get according to the rules.

Limits

The tests consist out of 4 test groups, each worth 25 points. In all test cases $1 \leq n \leq 10^6$ and $1 \leq a_i, c < 10^9$.



- In the first test group $n \leq 15$.
- In the second test group $n \leq 30$.
- In the third test group $n < 5\,000$.
- In the fourth test group there are no further restrictions.

Examples

Input	Output
6 80 50 8 60 90 1 2	62

Input	Output
5 10 5 4 3 4 5	10