**Jian Yang and Fund Collection**

Jian Yang has an amazing startup idea. This news spread in the whole Silicon Valley and investors lined up with their funding offers.

There are N investors numbered from 1 to N offering funds F<sub>1</sub>, F<sub>2</sub> … F<sub>N</sub> where F<sub>i</sub> are the funds offered by i<sup>th</sup> investor. Jian Yang starts collecting funds from investor 1, then to 2 and so on upto N<sup>th</sup>investor. He can also make jumps of length 1,2 or 3 i.e. from i<sup>th</sup> investor to i+1<sup>th</sup>, i+2<sup>th</sup> or i+3<sup>th</sup> investor. e.g. after collecting funds from investor 5, Jian Yang can jump to investor 6, investor 7 or investor 8.

Jian Yang has a stamina value S. Each jump decreases the stamina value by 1. If the stamina decreases to 0, he cannot make any more jumps and his fund collection stops.

Also Jian Yang cannot make two 3 length jumps consecutively.

Now Jian wants to collect as much funds as possible. You have to help him determine the maximum funds he can gather.

Constraints:

1<=N<=1000

1<=S<=1000

1<=F <sub>i</sub><=10<sup>6</sup>

Input:

First line contains two integers N and S, the number of investors and Jian Yang’s stamina value.

Second line contains N space separated integers denoting F<sub>1</sub>, F<sub>2</sub> … F<sub>N</sub> where F<sub>i</sub> are the funds offered by i<sup>th</sup> investor.

Output:

Print a single integer denoting the maximum funds Jian Yang can collect from investors.

Sample Input 1:

5 4

2 1 2 3 1

Sample Output 1:

9

Sample Input 2:

5 2

2 1 2 3 1

Sample Output 2:

7

Sample Input 3:

5 1

2 1 2 3 1

Sample Output 3:

5

Sample Input 4:

10 3

1 1 1 5 1 1 5 1 1 5

Sample Output 4:

12