✅ SeePro Cheating

Kunwar is helping Kunal cheat in his SeePro exam. The exam has only 1 question and Kunal needs to type K lines of code to pass it. Kunwar types for N minutes and on the ith minute, he types A_i lines of code. Since Kunwar and Kunal are sitting in the same lab, Kunal copies the code at the end of every minute. However, since Kunal is slow at typing, he can copy at most 8 lines of code at the end of the minute.

How much time does it take for Kunal to copy K lines of code?

Constraints

$N \leq 10^5$

$K \leq 10^{12}$

$A_i \leq 10^9$

Input format

The first line contains two integers N and K The second line contains N integers $A_1, A_2, ..., A_N$.

Output format

If it is impossible for Kunal to copy K lines of code in N minutes, output -1 Otherwise print a single integer — the minimum number of minutes Kunal needs to copy K lines of code within N minutes.

Sample Input

3 17

10 10 10

Sample Output

3

Explanation

Kunal can copy atmost 8 lines in minute 1 and 2. Then, he copies 1 line in minute 3 and gets to 17

❓ Clarifications

No clarifications have been made at this time.