Problem C. Holidays

Input file:	`standard input`
Output file:	`standard output`
Time limit:	2 seconds
Memory limit:	256 megabytes

Every one at Eonics loves planning their vacations in an optimal way by using the minimum number of leave days. Therefore, most of them use some days as *Bridge days* in order to enjoy a longer vacation with a minimum of holiday allowance used.

Harsh missed his home country India and wanted to plan his next vacation early. And since he had to mark it on his agenda, he asked you to help him to arrange his holidays in the best possible way.

You are given n integers representing the period of days in which **Harsh** wants to arrange his vacation, v the length of his desired vacation and l the number of leave days left for **Harsh**. The n integers can be zeros or ones where 0 represent a public holiday and a 1 for a workday. Your task is to minimize the number of leave days Harsh needs to use for his vacation.

Input

Each test contains multiple test cases. The first line contains the number of test cases t ($1 \leq t \leq 100$). The description of the test cases is as follows:

The first line of each test case contains n ($3 \leq n \leq 10^4$) the length of the period that your coworker wants to plan his vacation in, v ($3 \leq v \leq n$) the length of his desired vacation and l ($0 \leq l \leq 10^4$) the number of leave days available. The second line of each test case contains n integers a_1,a_2,...,a_n ($0 \leq a_i \leq 1$), where 0 represent a holiday and 1 for a workday.

Output

For each test case, print r the rest of the leave days after planing Harsh's vacation. P.S. r can be negative too.

Example

standard input	standard output
2 10 5 6 0 0 1 1 1 0 0 1 1 1 6 3 3 1 1 1 1 1 1	3 0

Note

Bridge days are workdays linked with public holidays to form a longer vacation period.