Fish

Kuching the Cat enjoys eating fish. However, he accidently bought a large fish and does not want to eat all of it. To solve his problem, he has subdivided the fish into **N** linear segments (head to tail) and has given each segment a *'satisfaction rating'*. These segments are labelled 1 to **N**. The higher the *satisfaction rating*, the more Kuching will enjoy eating this segment of the fish. However, fish only taste nice if eaten as a chunk. One chunk consists of multiple linear segments of fish that are *contiguous*/*consecutive*.

Kuching is very picky and will not enjoy a chunk of fish where the sum of *satisfaction ratings* is *less* than **K** (i.e. he wants the sum to be **≥ K**). He wonders how many ways are there to cut a single chunk out of the fish such that he would enjoy eating. Those segments not part of the chunk will be thrown and not eaten

*To clarify: a chunk must contain *at least 1* linear segment of fish and can only contain up to **N** segments in total (i.e. the entire fish)

Input

The first line of input will contain two 32-bit signed integers, **N** and **K**. Note that **N** will always be positive while **K** can take both positive and non-positive integers.

The next line will be an array containing the *satisfaction rating* of the **N** segments. The i^{th} integer will be the *satisfaction rating* of the i^{th} segment of the fish. Do note that the *satisfaction ratings* will fit into a 32-bit signed integer and can take on positive and non-positive values.

Output

Output a single integer, the number ways there are to cut a single chunk out of the fish such that Kuching the Cat would enjoy eating (i.e. sum of *satisfaction ratings* **≥ K**).

Constraints

- Time Limit: 1s
- Memory Limit: 64MB
- 1 ≤ **N** ≤ 200,000

Subtasks

Subtask 1 (10 points): **N** ≤ 500

Subtask 2 (20 points): **N** ≤ 5,000

Subtask 3 (20 points): **N** ≤ 200,000. All the integers in the array are **≥ 0** (i.e. each segment's satisfactory rating are non-negative). **K** will also be non-negative.

Subtask 4 (50 points): **N** ≤ 200,000

Sample Input 1

```
5 2
1 -2 3 -4 5
```

Sample Output 1

```
6
```

Kuching the Cat has divided the fish into 5 segments. The first segment has *satisfaction rating* 1, 2nd has rating -2, 3rd has rating 3, 4th has rating -4 and the 5th has rating 5.

He will only enjoy chunks of fish which the sum of *satisfaction ratings* is more than or equal to 2.

Hence, the six chunks that he will enjoy are: [1 -2 3], [1 -2 3 -4 5], [-2 3 -4 5], [3], [3 -4 5], [5]

No other possible chunks will have a sum of *satisfaction ratings* **≥ K**.

Do note that [1 3 5] is not a valid chunk as they are not contiguous/consecutive.

Sample Input 2

```
5 -2
1 -2 3 -4 5
```

Sample Output 2

```
13
```