

★ Threshold Alerts

A compliance system monitors incoming and outbound calls and sends an alert whenever the average calls over a trailing number of minutes exceeds a threshold. If trailing minutes to consider, $preceedingMinutes = 5$, at time T , average the call volumes for times $T-(5-1)$, $T-(5-2) \dots T$.

For example, the calls over the last $n = 8$ minutes are represented in the array $numCalls = [2, 2, 2, 2, 5, 5, 5, 8]$. The threshold, $alertThreshold = 4$ and the trailing values to consider, $preceedingMinutes = 3$. No alerts will be sent until at least $T = 3$ because there are not enough values to consider. At $T = 3$, average calls = $(2 + 2 + 2)/3 = 2$. Average calls over the windows from $T = 3$ to the end at $T = 8$ are 2, 2, 3, 4, 5, and 6. A total of 2 alerts are sent during the last two periods. Given data as described, determine the number of alerts sent by the end of the timeframe.

Function Description

Complete the `numberOfAlerts` function in the editor below. It should return an integer that represents the number of alerts sent over the timeframe.

`numberOfAlerts` has the following parameter(s):

`preceedingMinutes`: an integer that represents the trailing number of minutes to consider

`alertThreshold`: an integer that represents the maximum number of calls allowed without triggering an alert

`numCalls[numCalls[0]..numCalls[n-1]]`: an array of integers where each `numCalls[i]` represents the number of calls made during minute i

▼ Input Format For Custom Testing

The first line contains an integer `preceedingMinutes`, that denotes the number of minutes to include in the average.

The second line contains an integer `alertThreshold`, that denotes the maximum average calls allowed before an alert is sent.

The third line contains an integer n , that denotes the duration of the time period in minutes and the number of elements in the array `numCalls`.

Each line i of the n subsequent lines (where $0 \leq i < n$) contains `numCalls[i]`, the number of calls during minute i . Time starts at $t=0$.

▼ Sample Case 0

Sample Input For Custom Testing

```
3
10
5
0
11
10
10
7
```

Sample Output

```
1
```

Explanation

An alert is sent at the end of minute 3 since the average number of calls in the previous three minutes (11, 10 and 10) exceeds 10.