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1  /// Road-Side Shop with Detailed Explanation
2  /// Array out-of-bound is prevented by setting starting and ending indices to
3  /// the inner region.
4  #include <stdio.h>
5
6  int main() {
7      int N, K, i, center;
8      int A[10000];
9      int max = -1;
10     scanf("%d %d", &N, &K);
11
12     for(i = 0; i < N; ++i) {
13         scanf("%d", &A[i]);
14     }
15
16     // The most common mistake of this exercise is that an array index is
17     // negative or beyond the end.
18     // Notice that center starts from K and ends at N - K. Therefore, when
19     // we iterates over i in the inner loop, the values of i will not be
20     // negative or go beyond the end of array A.
21     for(center = K; center < N - K; ++center) {
22         int sum = 0;
23         for(i = center - K; i <= center + K; ++i) {
24             sum += A[i];
25         }
26         if(sum > max) {
27             max = sum;
28         }
29     }
30
31     printf("%d", max);
32
33     return 0;
34 }

```