MaximumSumIndexK

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Problem Submissions Leaderboard Discussions

Given an array A of N integers and an integer k, find a contiguous subarray which has maximum sum and which includes the element A[k]. Implement a **linear time** algorithm for the problem.

Input Format

```
N k
A0 A1 ... AN-1
```

Constraints

$1 \leq N \leq 10^6$

$0 \leq k \leq N-1$

$-100 \leq A_i \leq 100$

Output Format

```
Sum of a sub-array of A which contains A[k] and has largest sum
```

Sample Input

```
10 3
5 -21 11 -18 22 -10 -18 0 4 2
```

Sample Output

```
15
```

Explanation

The largest sum subarray which also contains -18 is [11,-18,22]. Sum is 15.

Submissions: 61
Max Score: 4
Difficulty: Medium

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Current Buffer (saved locally, editable) C++

```
1 #include <cmath>
2 #include <cstdio>
3 #include <vector>
4 #include <iostream>
5 #include <algorithm>
```

```
6  using namespace std;
7
8
9  int main() {
10     /* Enter your code here. Read input from STDIN. Print output to STDOUT */
11     return 0;
12 }
13
```

Line: 1 Col: 1

Upload Code as File Test against custom input Run Code Submit Code