

<https://course.acciojob.com/idle?question=78a04c65-669a-4f89-a4f8-437a35a285f7>

● MEDIUM

● Max Score: 40 Points

●

## Longest Sub-Array with Sum K

Given an array containing N integers and an integer K., Your task is to find the length of the longest Sub-Array with the sum of the elements equal to the given value K.

### Input Format

The first line contains 2 integers N(size of the array) and K(required sum).

The next line contains N integers denoting elements of the array

### Output Format

Length of longest Sub-Array with sum K. In case no subarray exists output 0.

### Example 1

Input

```
6 15
10 5 2 7 1 9
```

Output

```
4
```

Explanation

The required sub-array is {5, 2, 7, 1} of length 4.

## Example 2

Input

```
5 10  
1 3 4 2 1
```

Output

```
4
```

Explanation

The required sub-array is {1, 3, 4, 2} of length 4.

## Constraints

$1 \leq N \leq 100000$

$-100000 \leq A[i], K \leq 100000$

### Topic Tags

- Hashing

# My code

```
// n java  
import java.util.*;  
import java.lang.*;  
import java.io.*;  
  
public class Main  
{
```

```

public static void main (String[] args) throws
java.lang.Exception
{
    //your code here
    Scanner s=new Scanner(System.in);
    int n=s.nextInt();
    int k=s.nextInt();
    int arr[]=new int[n];
    for(int i=0;i<n;i++)
        arr[i]=s.nextInt();
    int sum=0;
    int ans=0;
    int i=-1,j=-1;
    while(true)
    {

        if(i==n-1 && sum<=k)
            break;

        if(sum<=k)
        {
            i++;
            sum+=arr[i];
            if(sum==k)
            {
                int ans1=i-j;
                if(ans1>ans)
                    {ans=ans1;
                // System.out.println(i+" "+j);

```

```

        }
    }
}
else
{
    j++;
    sum-=arr[j];
    if(sum==k)
    {
        int ans1=i-j;
        if(ans1>ans)
        {ans=ans1;
        // System.out.println(i+" "+j);
        }
    }
}
}
}
System.out.print(ans);
}
}

```