

Find largest/smallest subarray with sum k in Given Array

Brute Force Approach:- We will use 2 Nested for loop and where i will start from index 1 and it will end at index N. similarly J will start from i it will end at N and I denotes the starting point of any subarray and J will denote the ending point of any subarray.

Now we will check if the sum of the elements present in the current sub array is equal to K we will update the maximum length with the current sub array's length

Pseudo Code:- <https://ideone.com/dfi5m7>

C++ - <https://ideone.com/qu2x29>

Java - <https://ideone.com/yXWSxe>

Py - <https://ideone.com/wVb6w9>

Optimised Approach:- Use the Hashmap and for every j, we will calculate i using formula $p[i-1] = p[j] - k$. Now we will check in map for the index where $p[i-1]$ has come. We will calculate current Length using $j-i+1$ and compare this length with Max and Min length and Update them if necessary.

Pseudo Code - <https://ideone.com/PSILCO>

C++ -

<https://ide.geeksforgeeks.org/online-cpp14-compiler/5e855364-59d7-4372-abd7-e5d41f021bd0>

Java -

<https://ide.geeksforgeeks.org/online-java-compiler/957f8f83-a8ab-4181-aa78-18f4ded1e3a2>

Python -

<https://ide.geeksforgeeks.org/online-python3-compiler/a85bb0d4-8083-4819-b11c-8ba5e83cbf08>