

★ Subarray sum equals k

array : 1 2 3 -1 2 1 -2
 k : 3

→ we'll use prefixsum & Hashmap to solve this problem (given constraints)

⇒ Brute

- Find all sub array
- check sum of every subarray
- IF sum == k , count++
- Answer = count

★ Optimization C

- Approach → $sum += arr[i]$ X
 → check if (sum

★ Optimization

- we'll use prefixsum & hashmap

At First we have $sum = 0$

∴ $map[0] = 1$

→ Now, iterate over the array

- do $sum += arr[i]$
- check if $(sum - k)$ is present in map or not.
- if present then add freq. $(sum - k)$ in answer.
- else add sum & it's freq. in map

- Repeat the process

	1	2	3	-1	2	-1	-2
$k = 3$							
$sum = 0$	1	3	6	5	7	6	4
$freq = 1$	1	1	1	1	1	2	1
	↓	↓	↓		↓	↓	↓
Initial	$C = 1$	$C = 2$	$C = 3$	$C = 2$	$C = 3$	$C = 3$	$C = 4$
condi...	$(3 - 3 = 0)$	$(6 - 3 = 3)$	$(6 - 3 = 3)$	$(5 - 3 = 2)$	$(7 - 3 = 4)$	$(6 - 3 = 3)$	$(4 - 3 = 1)$
	↓	present	present	present	present	present	present
	present						
	in map						

Answer = 4