4.3 - Prefix Sums and Kadane's Algo

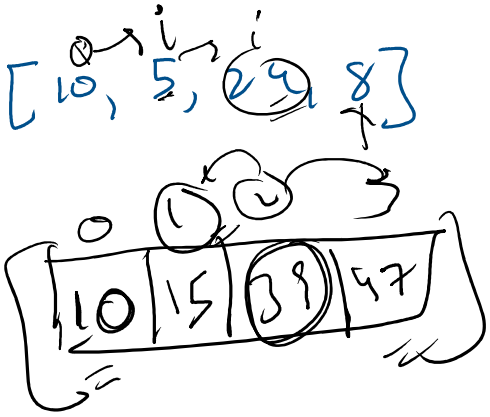
Saturday, August 30, 2025 1:29 PM

Prefix Sum

[8, 5, 13, 4, 9, 10]

[8, 13, 26, 30, 39, 49]

⇒ Prefix Sum array is an array that contains the sum of all the elements upto a position i.




```
prefix[n]
for(i=0; i<n; i++){
    if(i==0) prefix[i] = arr[i];
    else prefix[i] = prefix[i-1] + arr[i];
}
```

suffix

[47, 37, 17, 8]

Suffix Sum

Sum of elements upto a position i starting from end of the array.

#

Required portion

#

order

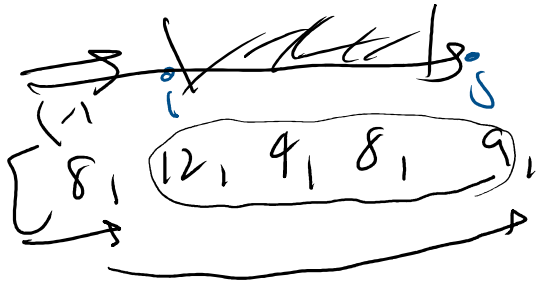
Subarray : Continuous portion

Subsequence : need not be continuous

8, 12, 4, 3, 6, 10

12, 9]

#



prefix[j] - pre[i-1]