

Make a copy of this doc and go on at your own pace

Prefix sum

- ☐ Let's start with the definition of prefix sum with some visualization of the following [Video](#)
- ☐ [Here](#) is the Slides for Prefix Sum.
- ☐ Articles on Prefix Sum:
 - ☐ [Geeks for Geeks](#)
 - ☐ [Algorithms: How Prefix Sums Can Help Improving Operations Over Arrays](#)
- ☐ What if we wanted to know the sum of any range or a range that doesn't necessarily start on the 0th index?
 - ☐ For eg:

```
arr = [10,20,5,10,5,15]
prefix_sum = [10,30,40,45,60]
sum(1,3) = ?
```
- ☐ Solve these basic prefix questions before moving on.
 - ☐ [Range sum query](#)
 - ☐ [Find pivot Index](#)
 - ☐ [Range-sum-query-2d-immutable](#)
- ☐ Other varieties of questions where prefix sum can be useful:
(Make sure you read other solutions even if your solution is accepted for the problems below)
 - ☐ [Subarray sum equals K](#)
 - ☐ [Subarray Sums Divisible by K](#)
 - ☐ [Contiguous Array](#)
- ☐ More questions ([Prefix Sum Problems](#))
 - ☐ [Maximum Side Length of a Square with Sum Less than or Equal to Threshold](#)
 - ☐ [Intervals Between Identical Elements](#)