



Lecture-1

ARRAYS

Arrays

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Bubble Sort!



Optimsing Bubble Sort!



Lets do some more problems?

- Write a function which takes an array as argument and sorts them using selection Sort.
- There are two sorted arrays. First one is of size m+n containing only m elements. Another one is of size n and contains n elements. Write a function to merge these two arrays into the first array of size m+n.



Insertion Sort!



Merge Sort!



Binary Search!



Binary Search Applications!

- Upper bound and Lower Bound
- Square Root
- Pivot Element



Time to try?

- Write a function which takes a number X and an array and prints all prints all pairs which sum to X.
- Write a function which takes two sorted arrays, and their lengths as arguments and returns combined median of them without using the third array.

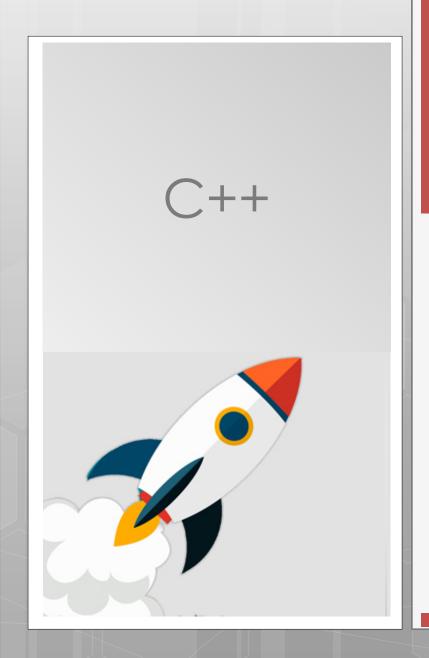


Max Sub-Array Sum?



Pigeon-Hole Principle?







Thank You!

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