

1	Write a method which takes two Stack objects as parameters and which returns a new Stack object which contains the contents of the first Stack, in the same order that they appear in the original, followed by the contents of the second stack in the same order that they appear in the original. Your Algorithm should leave the two original stacks unchanged when the method completes.
2	Write an $O(n \log n)$ algorithm that receives as input two n -element arrays a and b of real numbers and a value val . (The arrays are not sorted). The algorithm returns true if there are indexes I and J such that $a[I] + b[J] = Val$ and false otherwise.
3	Suppose n people are arranged in a circle & we are given a positive integer $m \leq n$. Beginning with a designated first person, we proceed around the circle removing m^{th} person. After each person is removed, counting continues around the circle that remains. This continues until all n people have been removed. The order in which the people are removed from the circle defines (n,m) Josephus permutation. Suppose that n,m is a constant Describe an $O(n)$ time algorithm that given integers n and m , outputs the (n,m) Josephus.
4	<p>(a) Write a program to delete the element (whose position is given) from a doubly link list</p> <p>(b) Write a program to to add to given polynomials.</p>
5	<p>Explain the following</p> <ul style="list-style-type: none"> a) Apriori and posterior analysis b) Micro and macro analysis c) Average, best and worst case analysis d) Big oh Notation e) Boyer Moore Algorithm for strings f) Prim's Algorithm g) Breadth first search h) Hashing i) Demand Paging j) Divide and Conquer strategy