

AAD1 (CSE2631) LAB EXPERIMENT

EXPERIMENT-07

Objective: Implement the Stack data structure to solve the following problems.

1. Implement a stack using a fixed length array.
2. Implement a stack using linked list.
3. Given a stack whose elements are sorted, write a function which will insert elements in sorted order. With highest at the top and lowest at the bottom.
Example: Stack= [1, 3, 4] [bottom->top], Insert 2 into the stack.
Output= [1, 2, 3, 4]
4. Given a stack, sort elements such that the largest value is at the top.
Example: stack= [3, 1, 4, 2]
Output= [1, 2, 3, 4] [bottom->top]
5. Given stack, write a function to insert an element at the bottom of the stack.
6. Given a stack, reverse its elements.
Example: stack= [1, 2, 3, 4]
Reverse= [4, 3, 2, 1]

NOTE: ALL THE PROBLEMS TO BE IMPLEMENTED WITHOUT JAVA COLLECTION.