

Data Structures and Algorithms - Assignment 2

1. Write a insertion sort function to sort array and returns no of comparisions.
2. Modify the insertion sort algorithm to sort the array in descending order
3. Write a function to sort employees by their salary.
4. Write program to implement linear queue in which front and rear starts at 0.
5. Write a program to implement descending stack. (Initialize top = SIZE)
6. Insert 5 elements in stack and find maximum value in stack without traversing it.
7. Create an array of integers. Reverse the array using stack
8. Implement circular queue using counter method
- Optional
9. Implement following algorithms for multi digit numbers i. postfix evaluation ii. prefix evaluation
10. Paperwork: Convert following examples from Infix to Prefix and Postfix. $K + L - M * N + (O * P) * W / U / V * T + Q (A + B) * C - (D - E) * (F + G)$
11. Paperwork: Convert following expression to Postfix and Prefix using stack. $5+9-4*(8-6/2)+1*(7-3)$