

Data Structure and Algorithm

1. What is an abstract data type ? Differentiate between data type and data structure. 7
2. Convert the given infix expression to postfix using stack 8
 $(A+B*C)/D-E^F/G+H/K$
3. Convert the given infix expression to prefix and evaluate using stack 7
 $A+B-C^D/E*F$
Where $A=1, B=2, C=1, D=2, E=1, F=3$
4. What are the limitations of Linear Queue and how that can be corrected in circular queue demonstrate it with algorithm. 8
5. Write an algorithm to search and element in a Singly linear linked list and update with new value 7
6. Write an algorithm to insert a node at last position in a doubly circular linked list. 8
Write short Notes on any one
1. Tower of Hanoi
2. Priority Queue