Lab Exercise-3

Lab exercise (C/C++):	40
1. Implement Tower of Hanoi on Stack using Linked list	10
2. Implement Parenthesis Matching on Stack using Linked list	10
3. Implement the insertion sort algorithm using doubly linked list	10

4. Take two sparse matrix A and B similar to following examples,
`int A[5][6] =`
`{`
`{0 , 0 , 0 , 0 , 9, 0 },`
`{0 , 8 , 0 , 0 , 0, 0 },`
`{4 , 0 , 0 , 2 , 0, 0 },`
`{0 , 0 , 0 , 0 , 0, 5 },`
`{0 , 0 , 2 , 0 , 0, 0 }`
`};`
`int A[5][6] =`
`{`
`{0 , 0 , 0 , 0 , 1, 0 },`
`{0 , 5 , 0 , 2 , 0, 0 },`
`{0 , 0 , 1 , 0 , 0, 5 },`
`{2 , 8 , 0 , 0 , 1, 0 },`
`{0 , 0 , 4 , 0 , 0, 0 }`
`};`
4.1. Write a program for the dense matrix multiplication
4.2. Represent them using array of linked lists
4.3. Write program for matrix multiplication using linked list representations
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Note:

- Students need to practice all questions in the assignments
- TAs will assign a random question in the lab