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| **PRO.NO.** | **DATE** | **TITLE** | **SIGN** |
| 1 |  | |  | | --- | | Create a Structure with following Data Members:  1. Integer Array  2. Size of the Array  Sort the Array using various Sorting algorithms such as  (i) Selection Sort (ii) Bubble Sort  (iii) Two-way Merge Sort (iv) Insertion Sort  (v) Quick Sort (vi) Radix Sort (vii) Heap Sort and  (viii) Shell Sort. And store the sorted Array in a text file. | |  |
| 2 |  | |  | | --- | | Create a Structure with following Data Members:  1. Integer Array  2. Size of the Array  Search an element in Array using Linear (Sequential)  Search and Binary Search. And Display result in file.  For Sequential Search, assume (a) Unordered Array,  and (b) Ordered Array and develop programs accordingly. | |  |
| 5 |  | Write a program to convert an infix arithmetic expression (parenthesize / unparenthesized)  into postfix notation. |  |
| 6 |  | Write a program to evaluate a postfix expression. |  |
| 7 |  | Create a structure with following Data members:  1. Integer Array  2. Size of the Array  Search an element in a given list using Binary search by recursion. And Display result in file. |  |
| 8 |  | Create a structure with following Data members:  1. Integer Array  2. Size of the Array  Perform the following operations on Simple queue using user-defined functions:  1. Insert an element  2. Remove an element  3. Display  4. Isfull  5. Isempty  Create a file which stores all values of Array. |  |
| 9 |  | Create a user-defined structure with the following data members:  1) A Data  2) A link to the next node  Perform the following operations on Simple queue using user-defined functions:  1. Insert an element  2. Remove an element  3. Display  4. Isfull  5. Isempty  Create a file which stores all values of list. |  |
| 10 |  | Create a structure with following Data members:  1. Integer Array  2. Size of the Array  Perform the following operations on Circular queue using user-defined functions:  1. Insert an element  2. Remove an element  3. Display  4. Isfull  5. Isempty  Create a file which stores all values of Array. |  |
| 11 |  | Create a user-defined structure with the following data members:   1. A Data 2. A link to the next node   Perform the following operations on Circular queue using user-defined functions:  1. Insert an element  2. Remove an element  3. Display  4. Isfull  5. Isempty  Create a file which stores all values of list. |  |
| 12 |  | Create a user-defined structure with the following data members:  1. A Co-efficient  2. A Exponent  3. A link to the next node  Perform the following operations on Singly list using user-defined functions:  1. Create  2. Display  3. Addition  4. Multiplication  Create a file which stores all values of list. |  |
| 13 |  | Create a user-defined structure with the following data members:  1. A Data  2. A link to the next node  Perform the following operations on list using user-defined functions:  1. Create a list  2. Traverse the whole list\  3. Delete first node  4. Delete last node  5. Delete a node before specified data  6. Insert at first position  7. Insert at last position  8. Insert a node before specified data  9. Insert a node at specified position  10. Count  11. Copy  12. Merge two list  13. Reverse  14. Search  15. Sort  Create a file which stores all values of list. |  |
| 14 |  | Create a user-defined structure with the following data members:  1. A Data  2. A link to the next node  Perform the following operations on Circular list using user-defined functions:  1. Create a list   |  | | --- | | 2. Traverse the whole list\  3. Delete first node  4. Delete last node  5. Delete a node before specified data  6. Insert at first position  7. Insert at last position  8. Insert a node before specified data  9. Insert a node at specified position  10. Count  11. Copy  12. Merge two list  13. Reverse  14. Search  15. Sort  Create a file which stores all values of list. | |  |
| 15 |  | Create a user-defined structure with the following data members:  1. A Data  2. A link to the next node  3. A link to the previous node  Perform the following operations on the doubly-linked list using user-defined functions:  1. Create a list  2. Traverse the whole list  3. Delete first node  4. Delete last node  5. Delete a node before specified data  6. Insert at first position  7. Insert at last position  8. Insert a node before specified data  9. Insert a node at specified position  10. Count  11. Copy  12. Merge two list  13. Reverse  14. Search  15. Sort  Create a file which stores all values of list. |  |
| 16 |  | Create a user-defined structure with the following data members:  1. A Data  2. A link to the next node  3. A link to the previous node  Perform the following operations on doubly-linked Circular list using user defined functions:  1. Create a list  2. Traverse the whole list  3. Delete first node  4. Delete last node  5. Delete a node before specified data  6. Insert at first position  7. Insert at last position  8. Insert a node before specified data  9. Insert a node at specified position  10. Count  11. Copy  12. Merge two list  13. Reverse  14. Search  15. Sort  Create a file which stores all values of list. |  |
| 17 |  | Write a program to represent an undirected graph using the adjacency matrix to implement the graph and your program be menu driven allowing the user the following options:  1. Create graph  2. Insert an edge  3. Print Adjacency Matrix  4. List all vertices that are adjacent to a specified vertex. 5. Print out vertices using depth first search  6. Print out vertices using breadth first search  7. Exit program |  |