**ADS**

**In the record, The following programs should be included:**

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| **Prerequisite Programs:**  **1) Balanced Parenthesis**  **2) Cycle Detection** | |
| **UNIT I** | |
| 1 | Implement a dictionary (Division Method) |
| 2 | Implement Linear Probing on a dictionary |
| 3 | Implement Quadratic Probing on a dictionary |
| 4 | Implement Double Hashing. |
| 5 | Implement Separate Chaining. |
| **UNIT II** | |
| 6 | Implement Binary Heap Operations. |
| 8 | Implement Expression Tree. |
| **UNIT III** | |
| 9 | Implement Operations on Binary Search Tree non recursive. |
| 10 | Implement AVL Tree. |
| **UNIT IV** | |
| 11 | Implement Prims Algorithm |
| 12 | Implement Krushkal’s Algorithm |
| 13 | Implement Sollin’s Algorithm |
| 14 | Implement Dijkstra’s Algorithm |
| 15 | Implement shortest path between all pair of vertices. |
| **UNIT V** | |
| 16 | Implement Brute force pattern matching algorithm. |
| 17 | Implement Boyer-Moore pattern matching algorithm. |
| 18 | Implement Knuth-Morris pattern matching algorithm. |