

**L.J Institute of Engineering and Technology**  
**Subject : DAA**  
**INDIVIDUAL PROJECT DETAILS**

1. Below project titles are for reference only. It is not compulsory to design following project. Students can find new project titles also.
2. Students should take project which they are able to complete by the end of the semester.
3. Project demo is compulsory during project evaluation time.
4. Project should not be copied from internet/friends. If caught then \*ZERO marks/Strict Action\* will be given.

Sr no	Individual Project Definition
1	Implementation of multiplying large integer problem using divide and conquer Technique.
2	Implementation of Making Change problem.
3	Implementation of Min-Max problem using divide and conquer Technique.
4	Implementation of Rabin Karp
5	Implementation of counting sort
6	Implement heap sort algorithm using heapify for min-heap
7	Implementation of naive string matching
8	Implementation of knapsack problem using backtracking method
9	implementation of Bellman ford algorithm
10	Implementation of Quick sort One pass of the array taken from user
11	Implementation of KMP string matching
12	Implementation of knapsack problem using branch and bound method
13	Implement a program to compare complexity of Binary search in Linkedlist and in an array.
14	Find all triplets with zero sum. Given an array of distinct elements. The task is to find triplets in the array whose sum is zero. Examples : Input : arr[] = {0, -1, 2, -3, 1} Output : (0 -1 1), (2 -3 1) Explanation : The triplets with zero sum are 0 + -1 + 1 = 0 and 2 + -3 + 1 = 0 Input : arr[] = {1, -2, 1, 0, 5} Output : 1 -2 1 Explanation : The triplets with zero sum is 1 + -2 + 1 = 0
15	Generate all binary strings from given pattern Given a string containing of '0', '1' and '?' wildcard characters, generate all binary strings that can be formed by replacing each wildcard character by '0' or '1'. Example :  Input str = "1??0?101" Output: 10000101 10001101 10100101 10101101 11000101 11001101 11100101 11101101
16	Implementation of traveling salesman problem
17	Implementation of job scheduling algorithm
18	implementation of Floyd warshall algorithm
19	Implement MST algorithm (Prim's algorithm, Kruskal's algorithm) using greedy algorithm
20	Implement heap sort algorithm using heapify for max-heap
21	Implement Matrix chain multiplication algorithm and print optimal parenthesis sequence of matrix using dynamic programming
22	Implement Graph traversal technique (BFS, DFS)
23	Implement 0/1 knapsack algorithm using dynamic programming
24	Implement activity selection problem algorithm using greedy method