**Assignment-3** 

**Subject: Data Structure and Algorithm Lab** 

Note: All programs must be implemented using JavaScript

1. Write a program to solve jump game problem using greedy method.

2. Write a program to implement Euclidean Algorithm using divide and conquer method.

3. Write a program to sort an array using merge sort. (divide and conquer method)

4. Write a program to sort an array using Quick sort. (divide and conquer method)

5. Write a program to solve Tower of Hanoi problem using divide and conquer method.

6. Write a program to find Fibonacci number using Dynamic programming.

7. Write a program to find unique path using Dynamic programming.

8. Write a program to find Longest Common Substring from given strings using Dynamic programming.

9. Write a program to implement N-Queens Problem using Backtracking method.

(Programs must be executed and printed o/p should be attached with handwritten program with Name of student in each output page)

Last date of Submission: 25<sup>th</sup> November 2023