Symbiosis Institute of Technology

Faculty of Engineering

CSE- Academic Year 2023-24

Data Structures – Lab Batch 2022-26

Lab Assignment No:- 1,2,3	
Name of Student	
PRN No.	
Batch	
Class	
Academic Year & Semester	
Date of Submission	
Title of Assignment:	A. Implement following searching algorithm: Linear search with multiple occurrences B. Implement following searching algorithms in menu: 1. Binary search with iteration 2. Binary search with recursion
Theory:	1. Prepare table for following searching and sorting algorithms for their best case, average case and worst case time complexities. Linear search, binary search, bubble sort, Insertion sort, selection sort, merge sort, quick sort. 2. Discuss on Best case and Worst case time complexities of Linear search, binary search, bubble sort, Insertion sort, selection sort, merge sort, quick sort.
Source Code/Algorithm/Flow Chart:	

Output Screenshots (if applicable)	
Conclusion	Thus we have studied different sorting algorithms and their time complexities.