

## LAB ASSIGNMENT 7:

1) Write a C/C++ program for implementation of : a) Merge sort algorithm

b) Selection sort algorithm using given input

i) Input: Neo → Trinity → Morpheus → Smith → Cypher

Output: Cypher → Morpheus → Neo → Smith → Trinity

ii) Input: 39 26 45 1 8 82 11

Output: 82 45 39 26 11 8 1

iii) Input: 39 26 45 1 8 82 11

Output: 1 8 11 26 39 45 82

2) Write a C/C++ program for implementation of below table:

branch-name is the name of a branch which grants the loan.

loan-number is the identifier of the loan.

amount is the amount of money in the loan.

Apply: a) Sequential Search b) Binary Search

**Input:** i) branch-name -> Clear Water Bay **Output :** Record is found or not

ii) branch-name -> Howe **Output :** Record is found or not

iii) loan-number **Output :** Record is found or not

iv) amount **Output :** Record is found or not

branch-name	loan-number	amount
Clear Water Bay	1	150,000
Howe	2	20,000
Howe	3	600,000
McEwan	4	80,000
Signal Hill	5	90,000
Signal Hill	6	20,000
Downtown	7	30,000
Downtown	8	10,000
Clear Water Bay	9	250,000
Tsuen Wan	10	10,000