

## Dire Dawa University – Institute of Technology School of Computing

## **Department of Software Engineering**

## <u>Design and Analysis of Algorithm - Group Assignment - 10%</u>

Select and write a C++ Program to implement the following problem-solving algorithms:

- 1. Divide and Conquer Algorithms
- 2. Greedy Algorithms
- 3. Dynamic Programming Algorithms
- 4. Graph Algorithms (BFS and DFS)
- 5. Backtracking Algorithms

```
List of your Group Members with their ID No

1. Mr X

2. Mr Y

3. ...

Menu

Press 1 for Binary Search Problem
Press 2 for Max-Min Problem
Press 3 for Merge Sort Problem
Press 4 for Quick Sort Problem
Press 5 for Exit

Press Enter to return to Quincy...
```

## **NB**:

- Maximum number of group members are 5.
- The program should be a single (.cpp) file.
- The program should have a menu to select the problems.
- Every necessary input should be entered from the keyboard.
- The name of group members should be included on the top of the program.
- Deadline: May 31/2025 G.C.