

Department of Electrical and Computer Engineering
North South University
Assignment 1 - CSE 373
Section 1, 2, 3
Deadline: 24 August 2020

Title of the Assignment: Implementation of Merge Sort Algorithm

Problem Statement

Mergesort is a popular sorting algorithm that uses the divide and conquer strategy to sort a sequence of data of the same data type. In this assignment, you are required to implement the merge sort algorithm using a high level programming language of your own choice such that it would sort a sequence of integers into non-decreasing order. You should not use any built in functions other than the usual ones.

Input

First the user is going to provide the length of the sequence of integers followed by the input sequence. You may assume that the maximum length of the sequence is no more than 100. If the length of the sequence of integers is given zero (0), then the program should come out of the loop and terminate.

Output

Output is the sequence of the input sequence in non-decreasing order.

Input Example

6
6 4 3 1 11 2

3
1 2 3

3
1 -2 0

0

Output Example

1 2 3 4 6 11

1 2 3

-2 0 1

Deliverable

Your deliverable should include the relevant code only. Please make sure that you submit your assignment (within the deadline) via the google classroom and is in the pdf format only.