



Taibah University
College of Computer Science and Engineering (Yanbu) Fall(2022)

Algorithms & Data Structures

Coursework 01

Due Sunday 11 Sep 08:00 AM

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7 September 2022

Instructions

1. You must submit your solution using Blackboard. Email submissions will not be accepted. Blackboard can be accessed from the University's website using the following address : <https://lms.taibahu.edu.sa>
2. You can discuss answers with your colleagues, but cheating is prohibited and there will be extreme consequences.

Problem 1

Identify inputs and outputs of each of the following problems:

1. Concatenating two strings; "Algorithms", "Data Structures"?
2. Sorting a set of numbers in descending order?
3. Finding the average of given set of numbers?
4. Finding the roots of a quadratic equation $ax^2 + bx + c = 0$

Problem 2

Using Pseudocode, write an algorithm that finds the index of the second minimum item for a given array a?

Problem 3

Using Pseudocode, write an algorithm for swapping two given values?