



UNITED INTERNATIONAL UNIVERSITY

Department of Computer Science and Engineering (CSE)

CT-01

35 mins

Set A

Course : DSA I Lab

Trimester & Year: Spring 2025

Name :

Course Code: CSE 2216

Section: D

Total Marks: 20

ID:

SN	Questions	Marks														
1	<p>Your company has introduced a special type of lottery. In this lottery, participants are randomly paired. After pairing, it is checked whether the names of the paired participants are anagrams of each other.</p> <p>A name is considered an anagram of another if it can be formed by rearranging all the letters of the other name without adding or removing any characters.</p> <p>Since a large number of people are participating in the lottery, you need to automate the verification process. Your task is to write a program that, given two names, determines whether one can be rearranged to form the other.</p> <p>Input:</p> <ul style="list-style-type: none">The first line contains a string A — the name of the first participant.The second line contains a string B — the name of the second participant.Both names consist of only uppercase and lowercase English letters. The comparison is case-sensitive, meaning "John" and "john" are considered different. <p>Output:</p> <ul style="list-style-type: none">Print "YES" (without quotes) if the names are anagrams of each other. Otherwise, print "NO". <table><tr><th>Sample Input</th><th>Sample Output</th></tr><tr><td>listen silent</td><td>YES</td></tr><tr><td colspan="2">Explanation: "listen" can be rearranged to form "silent".</td></tr><tr><td>rahat nasif</td><td>NO</td></tr></table> <p>Marking Criteria</p> <table><tr><td>Logic</td><td>4</td></tr><tr><td>Implementation</td><td>4</td></tr><tr><td>Overall correctness</td><td>2</td></tr></table>	Sample Input	Sample Output	listen silent	YES	Explanation: "listen" can be rearranged to form "silent".		rahat nasif	NO	Logic	4	Implementation	4	Overall correctness	2	10
Sample Input	Sample Output															
listen silent	YES															
Explanation: "listen" can be rearranged to form "silent".																
rahat nasif	NO															
Logic	4															
Implementation	4															
Overall correctness	2															

SN	Questions	Marks												
2	<p>You are given two integer arrays nums1 and nums2. Your task is to find their intersection, which consists of elements that appear in both arrays. Each element in the result must be unique, and you may return the result in any order.</p> <p>Input:</p> <ul style="list-style-type: none">• The first line contains an integer n — the size of the array nums1.• The second line contains n space-separated integers nums1[i].• The third line contains an integer m — the size of the array nums2.• The fourth line contains m space-separated integers nums2[i] <p>Output:</p> <ul style="list-style-type: none">• Print a space-separated list of unique integers that appear in both arrays. The order of output elements does not matter. <table><tr><th>Sample Input</th><th>Sample Output</th></tr><tr><td>4 1 2 2 1 2 2</td><td>2</td></tr><tr><td>3 4 9 5 5 9 4 9 8 4</td><td>4 9</td></tr></table> <p>Marking Criteria</p> <table><tr><td>Logic</td><td>4</td></tr><tr><td>Implementation</td><td>4</td></tr><tr><td>Overall correctness</td><td>2</td></tr></table>	Sample Input	Sample Output	4 1 2 2 1 2 2	2	3 4 9 5 5 9 4 9 8 4	4 9	Logic	4	Implementation	4	Overall correctness	2	10
Sample Input	Sample Output													
4 1 2 2 1 2 2	2													
3 4 9 5 5 9 4 9 8 4	4 9													
Logic	4													
Implementation	4													
Overall correctness	2													