

CS2093D HARDWARE LAB WINTER 2022-23

Practice Set 4: (ARRAY & STRING HANDLING)

1. Given two sorted two-digit integer arrays of sizes n and m , write a program to merge them into a new sorted array of size $n+m$.
2. Write a program to read a $n \times m$ matrix and print the transpose.
3. Write a program to read a $n \times n$ matrix and find the sum of the squares of the elements in the principal diagonal and print it.
4. Write a program to check whether a given word is present in a given sentence. If present, count the number of occurrences of the given word in the given sentence.
5. Write a program to read n two digit numbers and sort them in ascending order.
6. Write a program to read a string of size n and two numbers $n1$ and $n2$ ($1 \leq n1 \leq n2 \leq n$), compute the substring between the indices $n1$ and $n2$ and print the result.

Important Instructions

- You are encouraged to complete all the questions. You are advised to complete the exercises from the previous practice set (Practice Set 3) before you attempt the exercises here.
- Adhere to the academic integrity policy of CSED, NITC.
- Only the students who submitted the practice lab assignments on the due date (22.03.2023) and time (8.00 AM) in Eduserver are eligible for practice lab evaluation.
- You are asked to report to the respective labs for practice at 8.55 AM/01.55 PM (CS01 and CS02/ CS03 and CS04).
- The Lab evaluation will begin at 9.00 AM/2.00 PM and ends at 12 PM/5.00 PM (CS01 and CS02/ CS03 and CS04).
- You must modify the assignments uploaded in the Eduserver according to the TA's request.
- The maximum Mark for the said evaluation is 3.
- All your programs must use formatted I/O.
- The modification Questions are strongly connected with the assignments of practice lab 4 only.
- Upload only a single .txt file (including all the programs)
- Files name(s): <ROLLNO>.<txt>