

# SORTING WANDS AND STACKING SPELLS... CO322'S FINAL INCANTATION

STEP INTO THE MAGICAL CODING REALM,
WHERE MERGE SORT WANDS GRACEFULLY ORCHESTRATE ORDER,
AND STACKS SPELLS CONSTRUCT FORTRESSES
OF STRUCTURED STRENGTH.
ENVISION YOUR CODE NOT JUST AS
LINES ON A SCREEN BUT AS POWERFUL
INCANTATIONS SHAPING HARRY POTTER'S TRIUMPHANT
DESTINY IN THE ULTIMATE BATTLE.

EMBARK ON THIS CODING ODYSSEY
WHERE EVERY ALGORITHMIC MOVE IS A BRUSHSTROKE
CONTRIBUTING TO THE MASTERPIECE OF SUCCESS.
WELCOME TO THE GRAND FINALE OF CO322,
WHERE OUR WIZARDRY WITH MERGE SORT
AND STACKS BECOMES THE SECRET SAUCE
FOR VICTORY, AND EVERY KEYSTROKE ADDS
TO THE ENCHANTING SYMPHONY OF TRIUMPH.



## CO322 DATA STRUCTURES & ALGORITHMS LAB 04 - LAB SHEET

### OBJECTIVES

- 1) Learn and implement merge sort and stack for code efficiency.
- 2) Grasp computational complexities, emphasizing time complexities.

#### TASKS

- 1) There are two questions given on HackerRank.
- 2) You need to submit your answers through HackerRank.
- 3) Find the link on the FEeLS course page

#### IN-LAB EVALUATION

You are required to code the solution for "Battle of Wizardry: Postfix Potion Power" during the lab, and this code will be subject to in lab evaluation.

You have a designated lab partner with whom you should collaborate to solve the in-lab problem. (The details of your lab partner can be found in the Lab\_Partner spreadsheet given in FEeLS lab 04 portal.)

It is essential that both you and your lab partner work together to find the solution. However, only one of you should submit the code to Hackerrankfor the "Battle of Wizardry: Postfix Potion Power" problem for further evaluation. Avoid submitting both.

Please include the names and registration numbers of both you and your lab partner at the beginning of the code as comments for proper identification.

#### IMPORTANT

Plagiarism will be checked with other groups, and marks will be reduced accordingly (for the "Battle of Wizardry: Postfix Potion Power" problem).

For the "The Triwizard Merge Sort" problem, you should have a separate code. You should submit to HackerRank.

Every student must submit codes for both problems to the FEeLS portal.

#### DEADLINE

The deadline for the submission is 21th Dec 2023 at 11:55 PM

