

Information Technology Department 2nd Year



Course: Programming Essentials in C++ Semester:1st term 2025/2026.

Lecturers: Dr. Nehal Elazaly, Dr. Mohamed Abd El Fattah

Assignment 3: C++ programming

Problem Description:

Write a C++ program that stores numbers in a **2D array**, and uses **pointers** to find:

- The sum of all positive numbers
- The sum of all negative numbers

Then display which sum is **greater** using an **if-else** statement.

Program Requirements:

- 1. Ask the user to enter the number of rows and columns.
- 2. Input the elements of a 2D array.
- 3. Use **pointer notation** (not normal indexing) to access elements.
- 4. Calculate:
 - Total of positive numbers
 - o Total of negative numbers
- 5. Use **if-else** to print which total is larger.

Expected Example Output

```
Enter number of rows: 2
Enter number of columns: 3

Enter elements: 5 -3 8 -2 0 4

Sum of positive numbers = 17
Sum of negative numbers = -5

Positive numbers have a higher total.
```

Submission Requirements

- File name: Assignment3_your_name.pdf file contains snapshot from your IDE (code and Output)
- The program should compile and run without errors.
 - Submit your file before the deadline. ()