## **American International University-Bangladesh**

## Data Structure Lab [G] Summer 2022-23 Lab Tasks 02 || 2D Array

- 1. Write a C++ program to initialize and display a 2D array of integers.
- 2. Implement a function in C++ to calculate the sum of all elements in a 2D array.
- 3. Write a C++ program to find the largest element in a 2D array.
- 4. Implement a function in C++ to count the number of rows in a 2D array.
- 5. Write a C++ program to find the average value of each row in a 2D array.
- 6. Implement a function in C++ to search for a specific element in a 2D array and return its position.
- 7. Write a C++ program to multiply two 2D arrays and store the result in a third array.
- 8. Implement a function in C++ to check if a given 2D array is square (i.e., number of rows equals number of columns).
- 9. Write a C++ program to sort the elements of each row in a 2D array in ascending order.
- 10. Implement a function in C++ to find the minimum element in a specific row of a 2D array.