

# CSE 112 : Object Oriented Programming Lab

## Lab - 1

Intake 52  
**Section - 4**

January 9, 2024

### Lab Tasks

1. Develop a C++ program to determine the largest number within an array of size 10.
2. Implement a C++ program to verify if a given number is a prime number.
3. Write a program in C++ to assign grades to a given number.

**Sample Table for Assigning Grades:**

Score Range	Grade
90 - 100	A
80 - 89	B
70 - 79	C
60 - 69	D
0 - 59	F

4. Build a class named 'Shape' with two private attributes, 'side1' and 'side2', along with methods 'area' and 'perimeter'. Implement setter and getter functions to access these attributes and display their values. Create two instances of 'Shape', setting the values 'side1=10' and 'side2=20' for the first instance, and 'side1=30' and 'side2=40' for the second instance.

Formula for area:  $\text{area} = 2 \times \left( \frac{\text{side1} + \text{side2}}{2} \right)$

Formula for perimeter:  $\text{perimeter} = 2 \times \text{side1} + 2 \times \text{side2}$