

## **COS30008 Data Structures and Patterns**

### **Tutorial 5a (Lambda)**

For this week's tutorial, you are going to practice writing codes with lambda expressions.

Write a program that perform the following:

- 1) Declare an array of integers and populate it with the following values:  
10, 8, 35, 12, 3, 57, 19, 22, 64, 9
- 2) Define a lambda to calculate and return the average of the numbers in the array
- 3) Define a lambda that returns the largest value from the array
- 4) Define a lambda that receives an integer and returns the position of the number in the array. If the number does not exist, it should return -1.
- 5) Implement a function that takes a lambda as a function pointer and display the value returned by the lambda.
- 6) Pass the lambdas from (2) and (3) separately to function (4) so that the results are displayed on the screen.
- 7) Call lambda from (4) in main.