**ICS 108 – Object-Oriented Programming**

**Lab # 25 – Searching and Sorting**

**Objectives:**

In this lab, the following topic will be covered:

1. Searching
2. Sorting

**Task**

Write a program that creates an array of numbers from 0 to 99,999 in ascending order. Display the execution time of invoking the linearSearch method and the binarySearch method. Display the execution time of invoking both searches for all the numbers: 0 to 100,000,000. You can use the following code template to obtain the execution time:

long startTime = System.*nanoTime*();  
*//perform the task;*long endTime = System.*nanoTime*();  
long executionTime = endTime - startTime;