CS 111 Lab 10

20 points

Goal: Test your understanding of the searching algorithms (linear and binary search)

Send lab questions to Shivam - ss00132@mix.wvu.edu

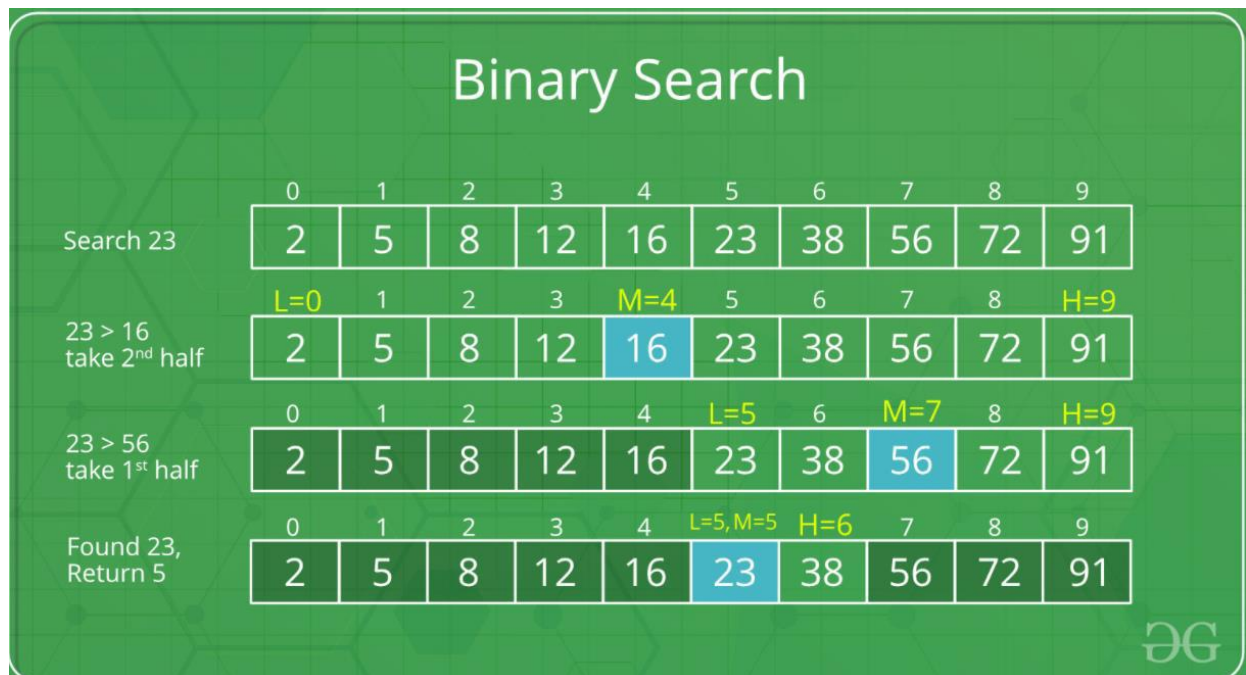## In this lab you will implement linear and binary search algorithms.

Part 1: Implement a Linear (Sequential search) algorithm
The standard sequential search algorithm simply loops over every element in an array to find the value. It will check each value one by one and compare it to the target, return the location if found, -1 if not.

Part 2: Implement a Binary Search algorithm
Binary search is an algorithm that starts in the middle of the array and compare the target to that element. If the element is the target, return the location, if the target is greater than the element looked at go to the middle of the right side, if the target is less than the element, go to the middle of the left side, and repeat. Will return the position if found, -1 if not.
**You must implement the binary search as a recursive algorithm. **

Source: https://www.geeksforgeeks.org/binary-search/

Additional requirements:

- Name included at the top of your code
- Clean readable and commented code