Assignment01.md 2024-11-07

Data Structures and Algorithms - Assignment 1

- 1. Write a linear search algorithm to return index of last occurance of key.
- 2. Write a program to print no of comparisions done to search a key in
 - o linear search
 - o binary serach
- 3. Create array of employees and search employee by
 - empid
 - o name
- 4. Implement binary search algorithm if array is sorted in descending order.
- 5. Implement linear search algorithm to find the nth occurrence of the given element. If nth occurrence is not found, return -1.
- 6. Find the first non-repeating element: Input: { 1, 2, 3, -1, 2, 1, 0, 4, -1, 7, 8 } Ouput: 3
- 7. Find rank of an element in an array of integers. rank: rank of a given integer "x" in the array, is "total no. of ele's less than or equal to x (including x). Input: { 10, 20, 15, 3, 4, 4, 1 } Ouput: Rank of 4 is: 4