

Lab. (4)

Searching Algorithms

Answer the following questions

Question One:

Write a C++ program to search a predefined element in an array of elements using the sequential search algorithm.

Question Two:

Write a C++ program to find the index the found element in previous question .

Question Three:

Write a C++ program to search a predefined element in an array of elements using the Binary search algorithm.

Question Four:

Write a C++ program to find the index the found element in previous question .

Question Five:

Write a C++ program to search a predefined element in an array of elements using the Jump search algorithm.

Question Six:

Write a C++ program to find the index the found element in previous question.

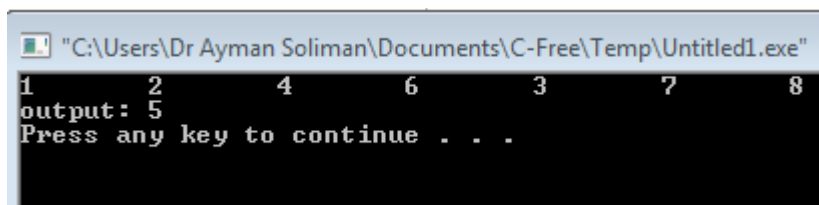
Question Seven:

You are given a list of n-1 integers and these integers are in the range of 1 to n. There are no duplicates in the list. One of the integers is missing in the list. Write an efficient code to find the missing integer.

Example :

Input: arr[] = {1, 2, 4, 6, 3, 7, 8}

Output: 5



```
"C:\Users\Dr Ayman Soliman\Documents\C-Free\Temp\Untitled1.exe"  
1      2      4      6      3      7      8  
output: 5  
Press any key to continue . . .
```