

Data Structure Assignment 5

Programming Homework

Text P.260 NO.1

1. Write a C function to delete the element with key k from a binary search tree.

What is the time complexity of your function?

Program

1. Get input to build binary search tree
2. There is a character ',' between elements (ex: 16,5,31,49,44,2,7,6,82)
3. Binary search tree 請每一層為一行,元素之間以空格隔開,若該位置沒有元素請用'*'來代表
4. The element k may not in the tree.

Readme

1. Your readme document should include program architecture, program function, how you design your program and **the time complexity of your function.**
2. You need to explain your answer.

Sample

Input:

16,5,31,49,44,2,7,6,82

Output:

```
Create Binary search tree
16
5  31
2  7  *  49
*  *  6  *  *  *  44  82
```

Delete element?(Y/N) : Y

Choice element: 7

Binary search tree

```
16
5  31
2  6  *  49
*  *  *  *  *  *  44  82
```

Delete element?(Y/N) : Y

Choice element: 4

4 is not in the tree

Delete element?(Y/N) : N

General Information:s

- Deadline : **2017/12/15 23:55.**
- Upload your assignment to Moodle system.
- Upload file format: Student-Id_Name.rar , Ex.P76991094_王小明.rar
- Your file should consist of the following items: Source Code &Readme file (Program description)
- Late homework will not be accepted.
- Any copies will be scored as zero. Do not plagiarize
- **Programming homework TA** 張維婷 Email: p76051098@mail.ncku.edu.tw