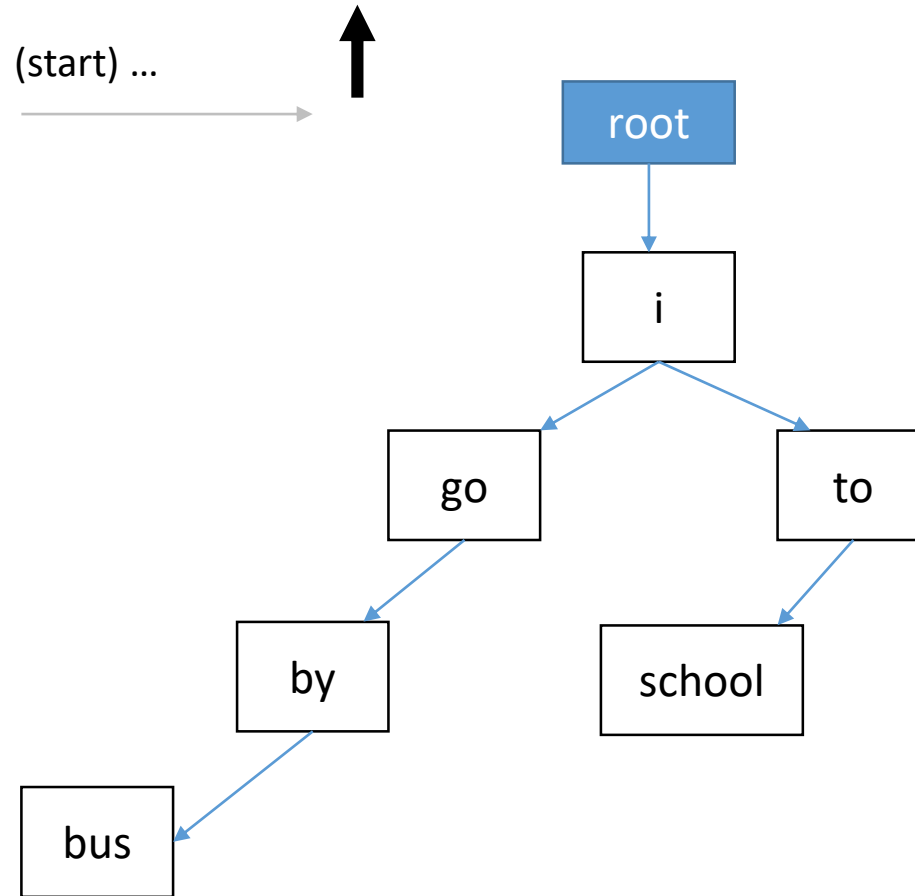


Part 3

Text Concordance Revisited

Problem :Text Concordance Revisited

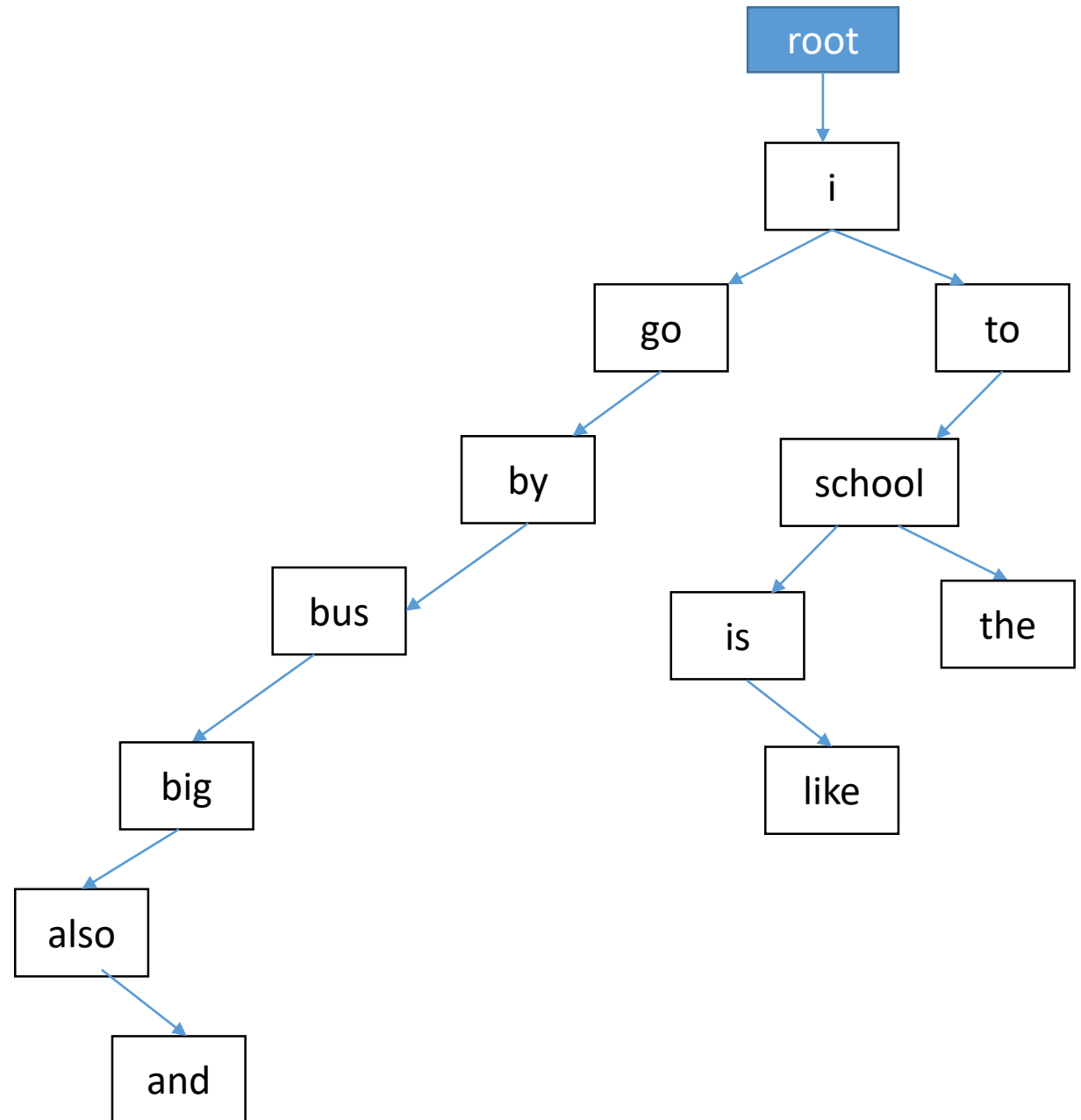
Input Passage: "i go to school by bus. the bus is big. the school is also big. i like big school and big bus."



Input Passage: “i go to school by bus. the bus is big. the school is also big. i like big school and big bus.”

Inorder Traversal:

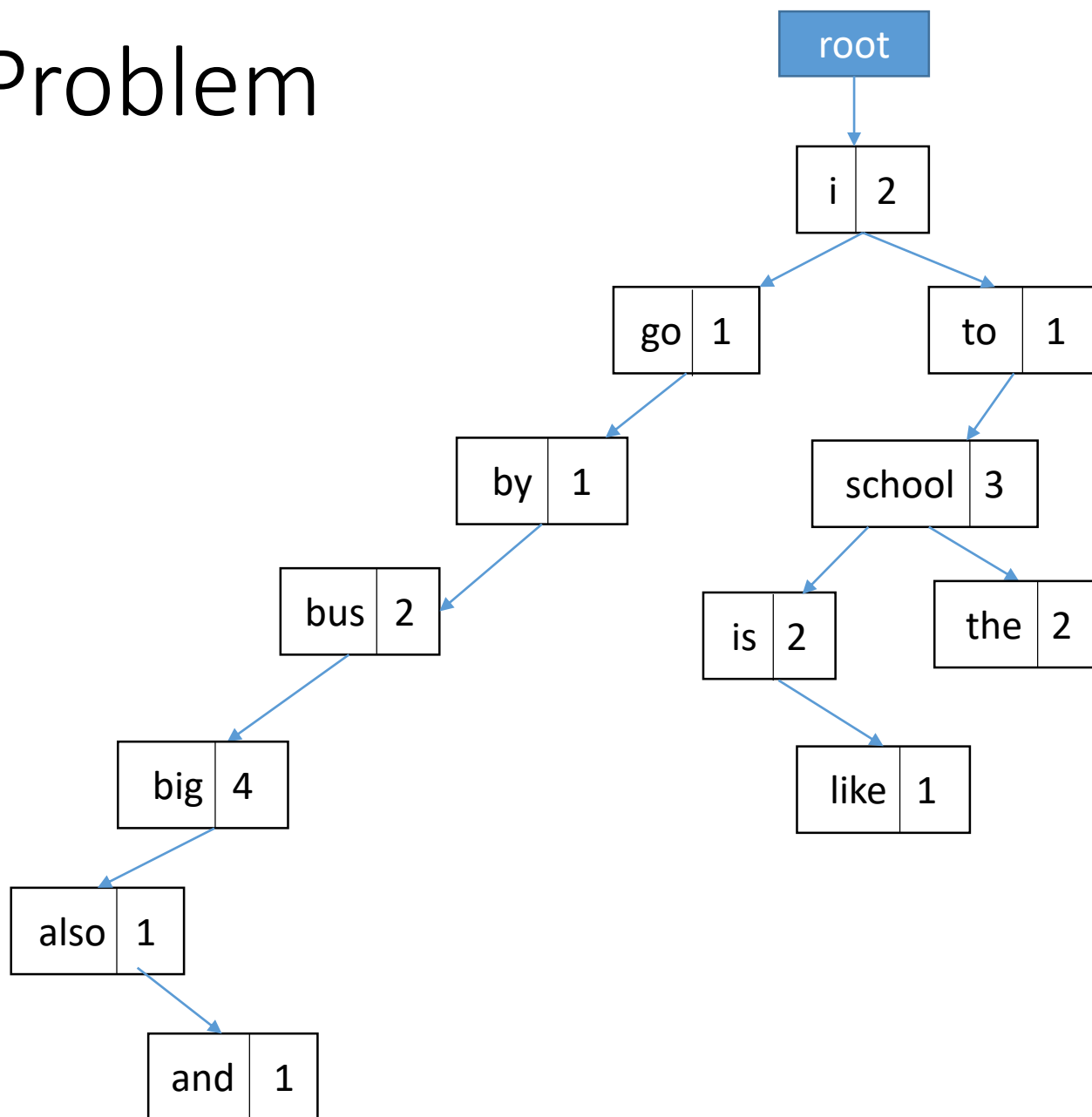
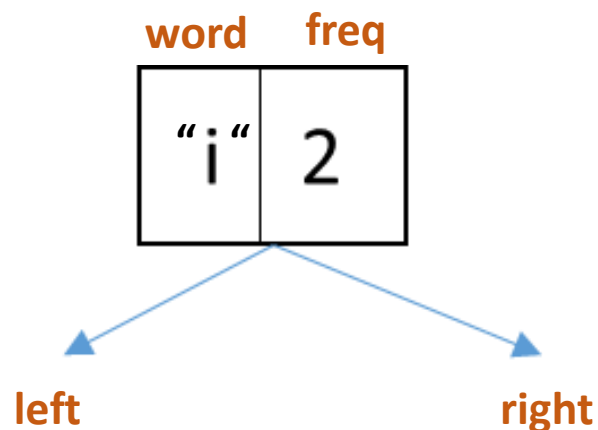
also
and
big
bus
by
go
i
is
like
school
the
to



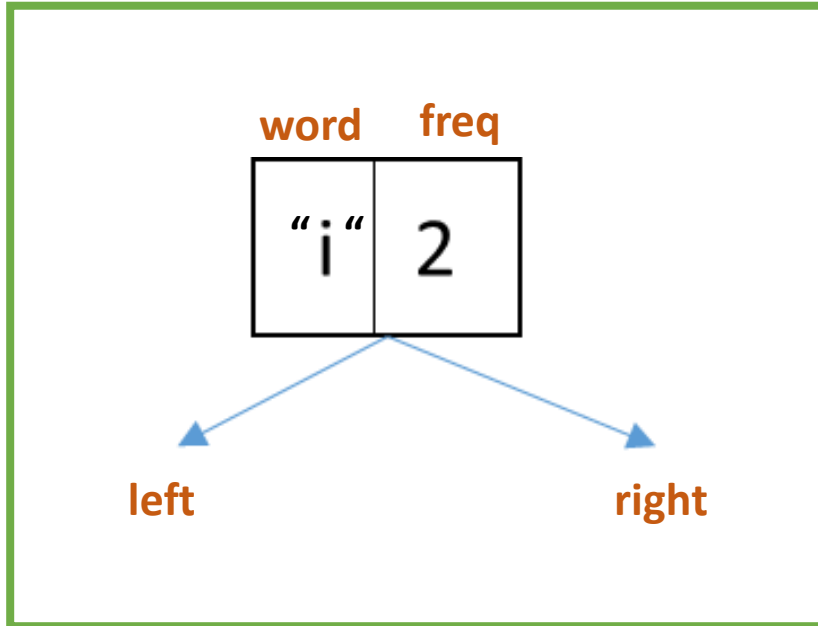
Word Frequencies Problem

Input Passage: "i go to school by bus. the bus is big. the school is also big. i like big school and big bus."

Where every node, consist of 4 elements



Node Structure



Class Node

```
class Node {  
    String word;  
    int freq;  
    Node left, right;  
  
    public Node(String item) {  
        word = item;  
        // update freq value  
        left = right = null;  
    }  
}
```

```

import java.util.*;

public class TreeApps2 {

    public static void main(String[] args)
    {
        int total=0;
        BinarySearchTree tree = new BinarySearchTree();
        Scanner in = new Scanner(System.in);

        String passage = in.nextLine(); // read input passage
        String delims = "\\W+"; // split any non word
        String [] words = passage.split(delims);
        for (String str : words){
            str = str.trim();
            tree.insert(str);
            total++;
        }
        tree.inorder();
        System.out.println("Total words: " + total);
    }
}

```

```

<terminated> TreeApps2 [Java Application] C:\Program Files\Java\jdk-11.0.1\bin\javaw.exe (31 May 2020, 1:41:43 pm - 1:42:22 p
i go to school by bus. the bus is big, the school is also big. i like big school and big bus.
also(1)
and(1)
big(4)
bus(3)
by(1)
go(1)
i(2)
is(2)
like(1)
school(3)
the(2)
to(1)
Total words: 22

```

Lab Task: Word Frequencies (BST)

Input	Output
Stay at home, stay safe and stay healthy. Practice social distancing at work and at home. Help reduce the risk of infection and preventing covid19. Together we break the chain of covid19. #kita jaga kita. Hapuskan covid19!.	Menu: 1. Add new word. 2. Delete word. 3. Search word. 4. Print all words and its frequency. 5. Exit. Input code: 4 Hapuskan(1) Help(1) Practice(1) Stay(1) Together(1) and(3) at(3) break(1) chain(1) covid19(3) distancing(1) healthy(1) home(2) infection(1) jaga(1) kita(2) of(2) preventing(1) reduce(1) risk(1) safe(1) social(1) stay(2) the(2) we(1) work(1)

Menu:
1. Add new word.
2. Delete word.
3. Search word.
4. Print all words and its frequency.
5. Exit.

Input code: 1

Enter new word: covid19
"covid19" has been added successfully

Menu:
1. Add new word.
2. Delete word.
3. Search word.
4. Print all words and its frequency.
5. Exit.

Input code: 3

Enter search word: covid19
"covid19" is used 4 times.

Menu:
1. Add new word.
2. Delete word.
3. Search word.
4. Print all words and its frequency.
5. Exit.

Input code: 2

Enter word to be deleted: covid19
one of "covid19" was successfully deleted

Menu:
1. Add new word.
2. Delete word.
3. Search word.
4. Print all words and its frequency.
5. Exit.

Input code: 5