Here is a subset of the API for the ST class you will use.

```java
class ST<Key, Value> {  // Note: Key must be Comparable
  ST() { }  // create a symbol table
  void put(Key key, Value v) { }  // put key-value pair into the table
  Value get(Key key) { }  // return value paired with key
  // or null if no such value
  boolean contains(Key key) { }  // is there a value paired with key?

  NOTE: Allows iteration with enhanced for loops:
  for (Key key : st) { . . . }  // executes body once for each key
```

Here is the API for the FrequencyTable class you will write.

A FrequencyTable represents a table that tracks the number of repeated occurrences of items in a list of Strings.

```java
class FrequencyTable {
  FrequencyTable() { }  // new table
  void click(String word) { }  // add one to frequency of this word
  int count(String word) { }  // what is frequency of this word?
  void show() { }  // print all words and frequencies
  void main(String[] args) { }  // build and print frequency table
                                // of words on standard input

  For Example: If you run FrequencyTable with the following input:

  duck duck goose

  you should see the following output:

  2 duck
  1 goose
```

Recommended Book Exercise: ST client program 4.4.23
Complete the code for the FrequencyTable class below.

```java
// Dependencies: ST.java (available on precepts page), StdIn, StdOut
public class FrequencyTable {
    // maintain counts of all words seen so far
    // the key is the word and the value is the count
    private ST<String> st = _____________________________ ;

    // add one to the frequency count for this word
    public void click(String word) {
        int count = count(word);
        st.put(word, count + 1);
    }

    // what is the frequency of this word?
    public int count(String word) {
        if (!st.___________(______)) return 0; // if word is not in ST
        else return ______._________(______); // get word’s count
    }

    // print out all words and frequencies (frequencies first)
    public void show() {
        // foreach loop. goes through all keys in alphabetical order
        for (String word : st) {
            // print out frequency and word, separated by a space
            StdOut.println(__________(____) + " " + _____________);
        }
    }

    // method used by client to count all words in StdIn
    public static void main(String[] args) {
        // build frequency table from words on standard input
        FrequencyTable freq = new FrequencyTable();
        while (!StdIn.isEmpty()) {
            String word = StdIn.readString();
            freq.__________(word);
        }

        // print frequency table to standard output
        freq.show();
    }
}
```