Computer Science 212
Object-Oriented Programming in Java

Lab 4

Aim: To practice with arrays and methods.

1. Download the application *Lab4Program1.java* from the folder for Lab 4 on Blackboard (it *may* also be available on the public drive of the lab machines in the directory *Spring2009*.) Open the program with the editor of your choice and observe the following:

   Two statements from the *JOptionPane* class take care of the input and output of Strings.
      JOptionPane.showInputDialog(null, String) opens an input window containing the message in the *String* parameter. The user may enter any String, and click OK. The method returns the String.
      JOptionPane.showMessageDialog(null, String) simply displays the String as a message in a window and waits for the user to click OK.

   Compile and run the program.

2. Note that no matter what word you type into the input dialog, the program always answers that the word is not on the list, because the method *wordIsThere* simply returns *false*.
   Rewrite the method *wordIsThere* so that it searches the array for the given word and returns *true* only if the word is on the list. Remember that you cannot compare Strings with the "==" operator. You must use the *equals* method of class String, for example:
            `if(s1.equals(s2))` will compare *String* s1 with *String* s2

    Compile and run the program.

3. The program only words for one word at a time. Insert an *if* statement that will cause the program to terminate (call *System.exit(0)*) if the word entered is "STOP". Surround the code that does the input, search and output with an infinite *while* loop (while(true){*code*}). Compile and run the program.