Lesson 29 Coding Activities

Download the zipped .java starter files with the program templates, and use them in DrJava or an IDE of your choice, to get a head start on the activity.

Make sure you have the following line above your main method:

```
public static String [] list = {};
```

Do not add or remove anything from this list.

Come to the forum with your questions and to share your test cases.

1. A student wants an algorithm to find the hardest spelling word in a list of vocabulary. They define hardest by the longest word.

    Write the code to find the longest word stored in an array of Strings called list. If several words have the same length it should print the first word in list with the longest length.

    For example, if the following list were declared:

    ```
    String list [] = {"high", "every", "nearing", "checking", "food ",
    "stand", "value",  "best", "energy", "add", "grand", "notation",
    "abducted", "food ", "stand"};
    ```

    It would print:

    ```
    checking
    ```

2. Write a loop that processes an array of strings. Each String should be printed backwards on its own line.

    For example, if the list contains:

```
{"every", "nearing", "checking", "food", "stand", "value"}
```

It should output:

```
yreve
gniraen
gnikcehc
doof
dnats
eulav
```