

Words and Files

Purpose:

Practise manipulating Strings, Files and logic.

Due Date:

The completed lab assignment is due Friday 2011-11-04 *at the beginning of lecture*.

General

As best you are able, segment your program into meaningful small methods.

Four-letter words and very big words

⇒ Write a program that searches the the file

- `/usr/share/dict/words`^{1 2}

to count the number of four-letter words and the number of words with twenty or more letters.

Palindromes

A *palindrome* is a word or phrase that reads the same when reversed. Some famous examples are:

- Madam, I'm Adam.
- Eve.
- A man, a plan, a canal, Panama.

⇒ Write a JAVA program that ask the user for a word, and then states whether or not the word is a palindrome. You may assume that the user only supplies lower-case words. That is, you don't need to worry about changing the case of letters or removing spaces and punctuation.

⇒ Write a program that searches the the file `/usr/share/dict/words` to find all of the lower-case palindromes that it contains.

¹Note: different systems have their dictionary files in different places. The name "`/usr/share/dict/words`" should work for most Linux machines.

²This used to read "`/usr/share/lib/dict/words`", which was a typographic error, fixed Friday 2011-10-28.