ES112.02/04

Fall 2003-2004 Term Project
Project #3: “Word Search”

1 The Project

The goal of this project is to write a computer program that will find all the (English) words that can be formed using a given number of letters. If more than one word can be formed, the words should be printed out in size order, the longest printed first.

2 The Dictionary

One thing you need to use in order to find possible English words is a file containing the English words that we intend to search for. Such a file already exists, and is standard in almost all Unix/Linux systems. You will be given a copy of this file, which contains one English word per line in it.

3 Project Requirements

3.1 Phase One

Phase one is simple. The program should read a string from the keyboard, and should try to find any words that can be formed using letters from that string, and print them out in decreasing size order. Upper/lower case differences should be ignored when searching words.

3.2 Phase Two

In phase two, your job is to allow the use of the asterisk ('*') as the wildcard character. If the input character has an asterisk in it, the asterisk should be able to match any character. Thus, with 10 letters and asterisk, we get something similar to the word-finding part of the old-time TV show “Bir Kelime-Bir İşlem.”