

Using LEX to do the following (excluding anything within the comments and double quotes):

- a. Count the total number of words. (2)
- b. Identify words not beginning with vowels and convert them to upper case. (4)
- c. List the words not beginning with vowels, the lines in which they occur, and the number of times each word occurs. (4)

Test case

```
// Borland C++ - (C) Copyright 1991 by Borland International
/* DCOPY.CPP -- Example from Getting Started */
/* DCOPY source-file destination-file          *
 * copies existing source-file to destination-file *
 * If latter exists, it is overwritten; if it does not *
 * exist, DCOPY will create it if possible          *
 */
#include <iostream.h>
#include <process.h>    // for exit()
#include <fstream.h>    // for ifstream, ofstream
main(int argc, char* argv[]) // access command-line arguments
{
    char ch;
    if (argc != 3)        // test number of arguments
    {
        cerr << "USAGE: dcopy file1 file2\n";
        exit(-1);
    }
    ifstream source;      // declare input and output streams
    ofstream dest;

    source.open(argv[1],ios::nocreate); // source file must be there
    if (!source)
    {
        cerr << "Cannot open source file " << argv[1] <<
            " for input\n";
        exit(-1);
    }
    dest.open(argv[2]);    // dest file will be created if not found
                        // or cleared/overwritten if found
    if (!dest)
    {
        cerr << "Cannot open destination file " << argv[2] <<
            " for output\n";
        exit(-1);
    }
    while (dest && source.get(ch)) dest.put(ch);
    cout << "DCOPY completed\n";
    source.close();        // close both streams
    dest.close();
}
```