

Programowanie Obiektowe (angielsku)

Due: May 12th 2009

1. Write a function

```
std::list<std::string> readwords( std::istream& stream )
```

that reads all words occurring in stream, and returns them in a list of strings in the order in which they were encountered. A word is a sequence of characters from the ranges $A \cdots Z, a \cdots z$ Other characters should be ignored. You can check if end of file is reached by calling `stream` which will be true as long as something can be read from stream.

2. Write functions:

```
char replaceuppercase( char c );  
void replaceuppercase( std::string& s );  
void replaceuppercase( std::list< std::string > & words );
```

that replaces all upper case characters by the corresponding lower case in their argument. Use iterators.

3. Write a function

```
std::map< std::string, unsigned int >  
frequencytable( std::list< std::string > & words )
```

4. Use the previous functions to count the words in some reasonably sized file. Write reasonable printing functions.