

Dictionaries

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#-----
def WordCount( filename ) :

    # Read the file 'filename' and return a dictionary, whose keys are
    # the distinct words in the file and whose corresponding values
    # are the number of times that the word occurs.
    #
    # If the file cannot be read, issue an error message and return
    # the empty dictionary.
    #
    # All words are converted to lower-case before being processed;
    # for best results, the input file should contain no punctuation,

    try :
        filehandle = open( filename, "r" )
    except IOError :
        print( "*** WordCount : cannot open file '%s'" % ( filename ) )
        return { }

    wordcount = { }

    for line in filehandle :
        linewords = line.split( )
        for word in linewords :
            word = word.lower( )
            if word in wordcount :
                wordcount[ word ] += 1
            else :
                wordcount[ word ] = 1

    return wordcount

#-----

$ cat So-Long-Marianne

Come over to the window my little darling
I'd like to try to read your palm
I used to think I was some kind of Gypsy boy
Before I let you take me home

Now so long Marianne it's time that we began
To laugh and cry and cry and laugh about it all again

#-----
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#-----
>>> wordcount = WordCount( "So-Long-Marianne" )
>>>
>>> for word in sorted( wordcount ) :
>>>     print( "%-10s - %2i" % ( word, wordcount[ word ] ) )

#-----

about      : 1
again      : 1
all        : 1
and        : 3
before     : 1
began      : 1
boy        : 1
come       : 1
cry        : 2
darling    : 1
gypsy     : 1
home       : 1
i          : 3
i'd        : 1
it         : 1
it's       : 1
kind       : 1
laugh      : 2
let        : 1
like       : 1
little     : 1
long       : 1
marianne   : 1
me         : 1
my         : 1
now        : 1
of         : 1
over       : 1
palm       : 1
read       : 1
so         : 1
some       : 1
take       : 1
that       : 1
the        : 1
think      : 1
time       : 1
to         : 5
try        : 1
used       : 1
was        : 1
we         : 1
window     : 1
you        : 1
your       : 1
```