PWr Week 8

Data Structures and Algorithms

Laboratory – List 8

- 1. Find ten most often words in a huge text file (a word is a **consecutive sequence of letters** from set 'a'..'z' or 'A..'Z', before count words, change all letters to small ones). For counting words use:
  - a. Binary search tree (without balancing)
  - b. Balanced binary search tree (implemented on your own or from library)
  - c. Hash table (implemented on your own or from library)

Present the solution on the screen. Write the time of computation for used structures.

## Examples of huge text files:

http://norvig.com/big.txt

<u>http://www.gutenberg.org/</u> (choose a big book in English in TXT format)

Example what are words in this task.

For a line:

It's a ver5y good #" idea of a line. You know it?

The words are:

it

S

a

ver

y

good

idea

of line

you

know

Words "it" and "a" are twice in the example text.

For **10 points** present solutions for this list till **Week 10**.

For 8 points present solutions for this list till Week 11.

For 5 points present solutions for this list till Week 12.

After Week 12 the list is closed.