Laboratory 2 – List of program options (translation)

Complexity of sorting algorithms

MAIN SYNTAX

TP2 OPTIONS_OF_THE_EXERCISE

OPTIONS

-v to display the generated sequences of numbers (by default these sequences are not displayed)

[1] For the data (all values are integers)

-f file_name read values from a data file, where **file_name** is a text file formatted as:
number_of_elements
first integer
second integer
...
Integer n

-a k generate a random sequence containing **'k'** integers

-mc k generate an already sorted (best case) sequence of **'k'** integers

-pc k generate a sequence of **'k'** integers sorted in inverse order (worst case)

-s file_name save generated values in a text file named **file_name**

[2] For sorting algorithms

-t algorithm were **'algorithm'** = **'selection'**, **'insertion'**, or **'bulle_naif'**

Examples:

Read data from file tab1.dat and sort it with bubble sort (bulle_naif). This command can be defined in two ways:

TP2 -f tab1.dat -t bulle_naif
TP2 -t bulle_naif -f tab1.dat

Generate a sequence of 10 random integers, sorted then using the insertion algorithm. This command can be defined in two ways:

TP2 -a 10 -t insertion
TP2 -t insertion -a 10

Generate a sequence of 20 integers in inverse order, sorted afterwards with selection sort and stored in file res_1.dat

TP2 -pc 20 -t selection -s res_1.dat