

Lab 8 Activities

Activity 1.

Write a Java program that carries out the following tasks:

- Open a file with the name hello.txt
- Store the message “Hello, World!” in the file
- Close the file
- Open the same file again
- Read the message into a String variable and print it

Activity 2.

Write a Java program that reads a file, input.txt, containing some information in separate lines. The very first line of the file is a single word that indicates the data type, integer, double, String, etc., of the values inside the file, starting from the second line. Sample txt files are attached.

Create an ArrayList corresponding to the type of the information, and then read each line of the file and add it into the ArrayList. Then sort the ArrayList, and store this sorted list into another file, outputSorted.txt, such that the first line shows the type of the information, followed by a comma, and the number of lines in the list, and the data itself from the second line.

Make your program more robust by checking the values read from the input file. For instance, if the data type is integer, check each value that is read from the file and if it is not a valid integer value, set it to 0, or just ignore it by not adding it into the ArrayList.

Try to modify your program such that it reads the names of the input and output file from command line arguments when the program runs. Also, get the type of the sort, ascending/descending, from the list of arguments.

Improve your program by detecting, catching and handling any possible checked/unchecked exceptions, such as I/O exceptions and input mismatch exception.