# 02. Memory Management – Homework Exercises

Write C++ code for solving the tasks on the following pages.

Code should compile under the C++03 or the C++11 standard.

Submit your solutions here: <https://judge.softuni.bg/Contests/1153/03-Exercises-on-Pointers-References-and-Dynamic-Memory> (select “Compete” when prompted)

Any code files that are part of the task are provided under the folder **Skeleton**.

Please follow the exact instructions on uploading the solutions for each task.

# Task 1 – Sort

You are given information about companies – lines with names and ids, ending with the line "end" – as well as a Company class that represents a company. Your task is to sort the companies either by their name or by their id. The last line of the input will contain either "name" or "id", indicating what you should sort the companies by

You should submit a single .zip file for this task, containing ONLY a single .cpp file, containing an int main() function that solves the task described.

The Judge system has a copy of the other files and will compile them, along with your file, in the same directory.

### Examples

|  |  |
| --- | --- |
| **Input** | **Output** |
| acme 424242420  softuni\_foundation 20140414  itjoro 878968302  end  id | softuni\_foundation 20140414  acme 424242420  itjoro 878968302 |