# **Memory Manager library**

### What is the Memory Manager library?

In some occasions the compiler doesn't warn of run-time errors related with the use of the dynamic memory. The Memory Manager library detects these errors and shows a message to the end of the program informing if the management of the dynamic memory in our program is correct or wrong.

If the control of the dynamic memory is correct, the program shows this message at the end:

#### NO hay lagunas de memoria ;-)

(This sentence is in Spanish, sorry about that). It means that there are no memory leaks.

If the control of the dynamic memory is incorrect, the program shows this message at the end:

#### Hay lagunas de memoria!! <:-[

This sentence means that there are memory leaks and frequently is related with errors when freeing the memory.

If we fail in the use of the dynamic memory either a message appear about the error or the compiler closes the program.

## How can I apply it to my program?

You should follow the next steps which allow the addition of the library to the project:

- 1. Both files *MemoryManager.h* and *MemoryManager-vc2013-d.obj* must be copied on the project folder.
- 2. The *MemoryManager.h* file must be added to the project as one of the files of the project by following the menu:

Project/Add Existing Item

3. The name of the file *MemoryManager-vc2013-d.obj* must be written in the box *Additional Options* of the following menu (see the picture):

Project/Properties/Configuration Properties/Linker/Command Line

- 4. The statement #include MemoryManager.h must be added in the header.h file after the pre-processor directives include (see slide 24).
- 5. The following statement must be added at the end of the *main* function, after the freeing of the memory. (see slide 26)

MemoryManager\_DumpMemoryLeaks();

