

Programowanie Obiektowe (angielsku)

Due: 17 March 2009

The purpose of this exercise is that you understand pointers, allocation and deallocation.

Download the program **list.cpp** and make sure that you understand it.

1. Write a function `unsigned int length(const list* lst)` that returns the length of a list.
2. Write a function `unsigned int sum(const list* list)` that returns the sum of the elements in the list.
3. Write a function `list* makecopy(const list* l)` that makes a copy of a list.
4. Write a function `void bubblesort(list& x)` that sorts a list, using bubble sort.
5. Write a function `void deletelist(list* l)` that deallocates a list.
6. Test the combination `addfront`, `makecopy`, `deletelist` for memory leaks, using the **top** command and a long **for** loop.