C++ / GUI 
Exercise 17

vectors

C++ provides a new class vector. You can use it like traditional arrays in C. Some
Documentation resides at http://www.cplusplus.com/reference/
In this task you will do some sorting and statistics.

1. Generate a vector of about 10 elements. Choose an element type (e.g. int). The
elements can be unsorted.
2. Try to access illegal indices using [] and at(int).
3. Define a function int sorted( Type one, Type two ), which returns 1 if num-
ber one is less or equal than number two and 0 otherwise.
4. Write a function to swap two elements of a vector.
5. Write a function to sort two elements of a vector. Use sorted and swap.
6. Write a function to calculate the average of a vector.
7. Write a function to find the smallest element of a vector. Use sorted.
8. Write a function to sort a vector.
9. If not already done, turn sorted into a template function.

Have fun!