„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 number 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!