

C++

Lab_1

1. Create *my_vol* class, the purpose of which is to calculate the volume of the cuboid $V = abc$, where a, b, c – page sizes. The values of a, b, c (of double type, private members of a class) must be passed to the constructor of this class. Enter the data from the monitor. The class must contain:
 - function for calculation of volume V
 - function for output of results on the monitor.
2. Familiarize yourself with the sample *Complex_class*. Create a *Triangle* class in which the three points A, B, C are vertices. The *Triangle* class should have a parameterized constructor and functions to display the coordinates of each vertex on the monitor. Create an object of type *Triangle* and display it on the monitor.
3. Create the *time_day* class, which gets the CPU time using the `DWORD GetTickCount()` function (add the header file “`windows.h`”, see MSDN) when creating the object. To do this, use a parameterized constructor. The class must contain a function that will output the data to the monitor. The destructor of the class must call `GetTickCount ()` again and count the time from creating the object to their destroying and output that time to the monitor. To stop the program execution time by 2 seconds, call the function `Sleep(2000)` from SDK platform. You will have to add `#include "windows.h"`. Introduce global, local and local static objects. Use the program *W8 ("timer")* as a model example. Try action for global and local class objects. Trace the place in the program where the constructors and destructors for global and local objects are called.