For this work, I had to use the Google Test (Gtest), but for this I had to install them on my Mac, but for me it was not an easy task. For this I used several articles and videos on YouTube. At first I tried to use only articles, but it didn't work because I didn't have CMake installed in my terminal. For this I needed commands:

*ruby -e "$(curl -fsSL* [*https://raw.githubusercontent.com/Homebrew/install/master/install*](https://raw.githubusercontent.com/Homebrew/install/master/install) *)”*

*brew install cmake*

All the commands that I used in the terminal:

*xcode-select –install*

*sudo xcodebuild -license accept*

*//Restart Trminal*

*ruby -e "$(curl -fsSL* [*https://raw.githubusercontent.com/Homebrew/install/master/install*](https://raw.githubusercontent.com/Homebrew/install/master/install) *)”*

*brew install cmake*

*cd ~/*

*git clone* [*https://github.com/google/googletest.git*](https://www.youtube.com/redirect?event=video_description&redir_token=QUFFLUhqbHFmTVEzYVgxUV9FVk9GUmpHVnVPMEl5UVlWd3xBQ3Jtc0tsZ0R3RWlwUnVYbTBLcUUzaTB1TFVHOEZrd1FNRWdwMURmbjNzTHdMM09KUDFkQWp1MW5RdE05cWRDbmdoMUFET0tLbkVRaWdOWmJXVmVyZ3lEdUs2a1ZZS29qWHRjMkp2N2M4SHZjaFdtOE1ERlNkbw&q=https%3A%2F%2Fgithub.com%2Fgoogle%2Fgoogletest.git)

*mkdir install*

*cd install*

*cmake*

*make*

*sudo make install*

//Done

Then everything went as in the article and everything was successfully installed. The next step for me was to connect the library to Xcode. Then I need to go to the project settings and change the following items:

Header search path :

/usr/local/include

Library search paths :

/usr/local/lib

Other Linker Flags :

-l gtest

This completes the settings. Further, you can create files and tests only by connecting the tests in the main and the library gtest

#include <gtest/gtest.h>

**int** main(**int** argc, **const** **char** \* argv[]) {

testing::InitGoogleTest(&argc, (**char**\*\*)argv);

**return** RUN\_ALL\_TESTS();

}

Links to articles and videos:

<https://stackoverflow.com/questions/65775984/how-to-run-gtest-googletest-for-c-c-application-in-xcode-12-and-macos-big-su>

<https://medium.com/@yc0/how-do-you-let-your-xcode-work-with-gtest-d66d6405c928>

<https://russianblogs.com/article/50981163437/>

<https://www.youtube.com/watch?v=ELpYxxIqMjI>