ISM Assignment 1 for C/C++ secure apps development

You have breached the adversary database and got its password hashvalue. The hash value is given in the attached file (check the table for your name).

You know that your adversary is using one of the most 10 million used passwords available here https://weakpass.com/wordlist/1935 (download file **ignis-10M.txt**).

You also know that they are using a technique that will make your rainbow tables useless because they add “ismsap” as a prefix to all user passwords and after that they hash them 2 times using MD5 (1st run) and SHA-256 (2nd run). The output from the MD5 step is hashed again with SHA-256.

Write a simple C/C++ application that will brute force the adversary password by using the 3rd party development library OpenSSL. The C/C++ implementation should contain one single **.c** or **.cpp** file. **The source code file name must contain your name**. The C/C++ implementation must print out the corresponding password at the console.

Please, fill up the response box with the **password** when you upload the implementation.

The C development library OpenSSL can be downloaded as installer bundle from your ISM accounts (x86 version) or go at https://slproweb.com/products/Win32OpenSSL.html (choose x64 version as v.1.1.1). In the source code file, please specify the version of OpenSSL you have used and what platform is targeted (x86 or x64).

All the solutions will be cross-checked with MOSS from Stanford. Solutions with a similarity of more than 50% will be canceled.