

ISM Assignment 2 for C/C++ secure apps development

Write a simple C/C++ application that will validate a digital signature by using the 3rd party development library OpenSSL. The digital signature is stored by the file **RSASign.sig** and the public 1024-bit RSA key is stored by the file **pubKeySender.pem** in PEM format. Signature was generated for SHA-256 by considering the padding **RSA_PKCS1_PADDING**.

The C/C++ implementation must print out:

- The corresponding decrypted content of the file **RSASign.sig**.
- The SHA-256 message digest computed for the file **ignis-10M.txt** available here <https://weakpass.com/wordlist/1935>.
- Final resolution regarding the integrity (signature validated or not) comparing the decrypted content and computed SHA-256 above.

The C/C++ implementation should contain one single **.c** or **.cpp** file. **The source code file name must contain your name.**

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.