

## #1 ISM Challenge (OpenSSL in C/C++)

Consider you have a list of pre-defined clear passwords stored by the file ***10-million-password-list-top-1000000.txt***.

Write a C/C++ application (one single source code file) using OpenSSL library to:

- Identify the clear password having the SHA-256 message digest as ***f50374f5acb53c120a6b5f65ad78fcf509ad174338be42db4e26944568e6ba20***. The clear password will be printed into the Console Application.
- Create an output text file containing the all SHA-256 message digests in hexadecimal representation. Each line of the output file corresponds to the clear password placed on the same line in the ***10-million-password-list-top-1000000.txt***.

All the solutions will be cross-checked with MOSS from Stanford and the very similar source code files (over 50%) will not be evaluated.