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

Consider you have a SHA-256 according to ***Accounts.txt***. Pick up the appropriate value corresponding to your name.

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

- Identify the right key file in ***Keys.zip*** by computing the SHA-256 matching the SHA-256 value associated to you. Print the file name into the Console Application.
- Use the identified key file in order to perform AES-CBC encryption of the file ***Accounts.txt***. The IV content will be set by putting value 0x01 on each byte. The encrypted output will be saved into a separate file.
- Restore the plaintext content by decrypting the previous operation result. Write the source code needed to validate that the restored file will match the plaintext one exactly. The restored output will be saved into a separate file.

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