

## Alice

1. Read(SharedSeed.txt)
2. Read(Message.txt)
3. Use **PRNG** to generate a key with equal size of message from SharedSeed.txt
4. Write the generated key in a Hex format
5. Compute the ciphertext
6. Write the ciphertext in Hex format

}

**Sleep(>=1 second): wait for Bob process**

7. Read(Bob's hash from file)
8. Compute the **HASH\_SHA256** of message and verify it against Bob's hash. Print verification output in acknowledgment file

## Bob

1. Read(Ciphertext.txt) and convert it into from Hex into a Byte array
2. Read(SharedSeed.txt)
3. Use **PRNG** to generate a key from SharedSeed.txt with equal size of message
4. Compute the plaintext
5. Write the plaintext in file
6. Compute the **HASH\_SHA256** of plaintext and write the hash in a Hex format