

Readme for Phase II

1. Read the readme file for (phase I) to know how the chat app works and how it can be tested using two virtual machines.
2. One side cannot send more than one message unless the first message was displayed by the other side.
3. Write the following command in the CMD to install the library of crypto for python:
 - pip3 install pycryptodome.
4. When client initiates the chat session the IV will be sent to the server.
5. When client or server sends a message, the following will be shown on his screen:
 - His plaintext.
 - The shared IV.
 - His ciphertext.
6. When client or server clicks on display, the following will be shown on his screen:
 - The other side ciphertext.
 - The shared IV.
 - The other side plaintext.
7. For every session the IV will be changed randomly depending on the random method taken from the pycryptodome library.
8. The key was hashed using the Hash library in python and was verified using the sha256 online tool.
9. The padding and unpadding were done using Padding library in python.