

For problem 1, I grabbed the message from a file and then encrypted and signed it using RSA with the generated Hash. I then decrypted the message and verified the signature.

For problem 2, I then modified the message by flipping characters at two positions, and the output resulted in the decryption of the modified message having the characters flipped compared to the original message.

For problem 3, Simulating a signature forgery attack, similar to problem 2 instead of modifying the message, I modified the signature by flipping a bit and verified the signature again. which resulted in a failed verification.