

Question 1:

- Provide a quick explanation why the following statements are **True** or **False**:
 1. Symmetric encryption is a crypto-mechanism where encryption and decryption are performed using different keys.
 2. With the use of symmetric encryption, the principal security problem is maintaining the secrecy of the key.
 3. The process of converting from plaintext to ciphertext is known as deciphering or decryption.
 4. The algorithm will produce a different output depending on the specific secret key being used at the time. The exact substitutions and transformations performed by the algorithm depend on the key.
 5. When using symmetric encryption it is very important to keep the algorithm secret.
 6. Ciphertext generated using a computationally secure encryption scheme is impossible for an opponent to decrypt simply because the required information is not there.