Symmetric (Same) key AES Algorithm for Encryption and Decryption.

**Encryption**

For this article I am making use of AES encryption algorithm wherein I am using a Symmetric (Same) key for encryption and decryption process.

Firstly the original text i.e. clear text is converted into bytes and then for the AES algorithm to perform encryption, we need to generate Key and IV using the derived bytes and the symmetric key.

Using Memory Stream and Crypto Stream the clear text is encrypted and written to byte array and finally the byte array is converted to Base64String and returned which is the final outcome i.e. the corresponding encrypted text.

**Decryption**

Firstly the encrypted text i.e. cipher text is converted into bytes and then similar to the encryption process here too we will generate Key and IV using the derived bytes and the symmetric key.

Using Memory Stream and Crypto Stream the cipher text is decrypted and written to byte array and finally the byte array is converted to Base64String and returned, which is the decrypted original text.