

```
1 using System;
2 using System.Collections.Generic;
3 using System.Linq;
4 using System.Text;
5 using System.Threading.Tasks;
6 using System.Security.Cryptography;
7
8 namespace DAL
9 {
10     public class AesCryp
11     {
12         public static string IV = @"Xp2s5v8y5BvDlGcK";// 16 chars = 128 bits
13         public static string Key = @"u7xsArDoF6JaNdRgUkXp2s5v8f2B1EaH"; // 32 chars = 256 bits
14
15         public static string encrypt(string decrypted)
16         {
17             AesCryptoServiceProvider aes = new AesCryptoServiceProvider();
18             aes.BlockSize = 128;
19             aes.KeySize = 256;
20             aes.IV = Encoding.UTF8.GetBytes(IV);
21             aes.Key = Encoding.UTF8.GetBytes(Key);
22             aes.Mode = CipherMode.CBC;
23             aes.Padding = PaddingMode.PKCS7;
24
25             // Convert string to byte array
26             byte[] src = Encoding.Unicode.GetBytes(decrypted);
27
28             // encryption
29             using (ICryptoTransform encrypt = aes.CreateEncryptor())
30             {
31                 byte[] dest = encrypt.TransformFinalBlock(src, 0, src.Length);
32
33                 // Convert byte array to Base64 strings
34                 return Convert.ToBase64String(dest);
35             }
36         }
37         public static string Decrypt(string encrypted)
38         {
39             AesCryptoServiceProvider aes = new AesCryptoServiceProvider();
40             aes.BlockSize = 128;
41             aes.KeySize = 256;
42             aes.IV = Encoding.UTF8.GetBytes(IV);
43             aes.Key = Encoding.UTF8.GetBytes(Key);
44             aes.Mode = CipherMode.CBC;
45             aes.Padding = PaddingMode.PKCS7;
46
47             // Convert Base64 strings to byte array
48             byte[] src = System.Convert.FromBase64String(encrypted);
49
50             // decryption
51             using (ICryptoTransform decrypt = aes.CreateDecryptor())
```

```
52         {
53             byte[] dest = decrypt.TransformFinalBlock(src, 0, src.Length);
54             return Encoding.Unicode.GetString(dest);
55         }
56     }
57 }
58 }
59
```