

Hex Translator

```
//http://www.bouncycastle.org/  
//MIT X11 License  
  
using System;  
  
namespace Org.BouncyCastle.Utilities.Encoders  
{  
    ///  
  
    /// A hex translator.  
    ///  
    public class HexTranslator  
    {  
        private static readonly byte[] hexTable =  
        {  
            (byte)'0', (byte)'1', (byte)'2', (byte)'3', (byte)'4',  
            (byte)'5', (byte)'6', (byte)'7',  
            (byte)'8', (byte)'9', (byte)'a', (byte)'b', (byte)'c',  
            (byte)'d', (byte)'e', (byte)'f'  
        };  
  
        ///  
  
        /// Return encoded block size.  
        ///  
        /// 2  
        public int GetEncodedBlockSize()  
        {  
            return 2;  
        }  
  
        ///  
  
        /// Encode some data.  
        ///  
        /// Input data array. /// Start position within input data
```

```

array. /// The amount of data to process. /// The output data
array. /// The offset within the output data array to start
writing from. /// Amount of data encoded.
public int Encode(
byte[] input,
int inOff,
int length,
byte[] outBytes,
int outOff)
{
for (int i = 0, j = 0; i < length; i++, j += 2) {
outBytes[outOff + j] = hexTable[(input[inOff] >> 4) & 0x0f];
outBytes[outOff + j + 1] = hexTable[input[inOff] & 0x0f];

inOff++;
}

return length * 2;
}

///

/// Returns the decoded block size.
///
/// 1
public int GetDecodedBlockSize()
{
return 1;
}

///

/// Decode data from a byte array.
///
/// The input data array. /// Start position within input data
array. /// The amounty of data to process. /// The output data
array. /// The position within the output data array to start
writing from. /// The amount of data written.
public int Decode(

```

```
byte[] input,  
int inOff,  
int length,  
byte[] outBytes,  
int outOff)  
{  
int halfLength = length / 2;  
byte left, right;  
for (int i = 0; i < halfLength; i++) { left = input[inOff + i  
* 2]; right = input[inOff + i * 2 + 1]; if (left < (byte)'a')  
{ outBytes[outOff] = (byte)((left - '0') <
```