

用C#实现的数据加密(一)对称加密算法 PDF转换可能丢失图片或格式，建议阅读原文

https://www.100test.com/kao_ti2020/219/2021_2022__E7_94_A8C_23_E5_AE_9E_E7_8E_c67_219879.htm 计算机等级考试训练软件《百宝箱》用C#实现的数据加密(一) 对称加密算法

以下是关于对称加密算法的C#实现代码，大家可以根据需要更改不同的算法，文中以Rijndael算法为例：

```
using System.using
System.IO.using System.Security.Cryptography.using
System.Text.namespace DataCrypto{/// /// 对称加密算法类///
public class SymmetricMethod{private SymmetricAlgorithm
mobjCryptoService.private string Key./// /// 对称加密类的构造函数/// public SymmetricMethod(){mobjCryptoService = new
RijndaelManaged().Key = "Guz(%amp.fvHUFCy76*h
%(HilJ$lhj!y6amp.95GUY86GfghUb#er57HBh(u
%g6HJ($jhWk7&amp.!hg4ui
%$hjk".mobjCryptoService.GenerateIV().byte[] bytTemp =
mobjCryptoService.IV.int IVLength = bytTemp.Length.if
(sTemp.Length > IVLength)sTemp = sTemp.Substring(0,
IVLength).else if (sTemp.Length sTemp =
sTemp.PadRight(IVLength, ).return
ASCIIEncoding.ASCII.GetBytes(sTemp).}/// /// 加密方法/// /// 待
加密的串/// 经过加密的串public string Encrypto(string
Source){byte[] bytIn =
UTF8Encoding.UTF8.GetBytes(Source).MemoryStream ms = new
MemoryStream().mobjCryptoService.Key =
GetLegalKey().mobjCryptoService.IV =
```

```
GetLegalIV().ICryptoTransform encrypto =
objCryptoService.CreateEncryptor().CryptoStream cs = new
CryptoStream(ms, encrypto,
CryptoStreamMode.Write).cs.Write(bytIn, 0,
bytIn.Length).cs.FlushFinalBlock().ms.Close().byte[] bytOut =
ms.ToArray().return Convert.ToBase64String(bytOut).}/// /// 解密
方法/// /// 待解密的串/// 经过解密的串public string
Decrypto(string Source){byte[] bytIn =
Convert.FromBase64String(Source).MemoryStream ms = new
MemoryStream(bytIn, 0, bytIn.Length).objCryptoService.Key =
GetLegalKey().objCryptoService.IV =
GetLegalIV().ICryptoTransform encrypto =
objCryptoService.CreateDecryptor().CryptoStream cs = new
CryptoStream(ms, encrypto,
CryptoStreamMode.Read).StreamReader sr = new
StreamReader(cs).return sr.ReadToEnd().}} 100Test 下载频道开
通，各类考试题目直接下载。详细请访问 www.100test.com
```