

رمز گذاری و رمزگشایی

رمزگذاری رشته ها :

برای این کار دو دکمه به فرم برنامه اضافه کنید ، با دکمه اول می توانید رشته مورد نظر خود را رمزگذاری کنید و با دکمه دوم آنرا از حالت رمز خارج کنید :

```
Dim Code As String, DataString As String, Temp As String
Sub Translate()
Dim I As Integer
Dim location As Integer
Temp$ = ""
For I% = 1 To Len(DataString$)
location% = (I% Mod Len(Code$)) + 1
Temp$ = Temp$ + Chr$(Asc(Mid$(DataString$, I%, 1)) Xor _
Asc(Mid$(Code$, location%, 1)))
Next I%
End Sub
Private Sub Command1_Click()
'This code is the encryption formula.
'Replace 'abcdefghijkl' with every string you want.
'you can even change the string length.
Code = "abcdefghijkl"
'Replace the 'It's the secret message' with the
'string you want to encrypt.
DataString = "It's the secret message"
Translate
MsgBox (Temp$)
End Sub

Private Sub Command2_Click()
DataString = Temp$
Translate
MsgBox (Temp$)
End Sub
```

رمزگذاری فایل ها :

برنامه زیر به نام فایل برای رمزگذاری ، نام فایل خروجی و کلمه رمز نیاز دارد. اگر فایل ورودی رمزگذاری نشده باشد فایل خروجی رمزگذاری شده خواهد بود و برعکس .

برای این کار دکمه‌ای به فرم برنامه اضافه کنید :

```
Sub FileEncodeAndDecode(InputFile As String, _
                        OutputFile As String, _
                        PasswordKey As String)

    Dim temp As Single
    Dim Char As String * 1
    Dim XORMask As Single
    Dim temp1 As Integer

    Open InputFile For Binary As #1
    Open OutputFile For Binary As #2

    For x = 1 To Len(PasswordKey)
        temp = Asc(Mid$(PasswordKey, x, 1))
        For y = 1 To temp
            temp1 = Rnd
        Next y

        ' Re-seed to throw off prying eyes
        Randomize temp1
    Next x

    Counter = 0
    For z = 1 To FileLen(InputFile)

        'Generate random mask
        XORMask = Int(Rnd * 256)

        'Get the char & change it
        Get 1, , Char
        Char = Chr$(Asc(Char) Xor XORMask)
        Put 2, , Char

        Counter = Counter + 1
        If Counter > Len(PasswordKey) Then Counter = 1

        ' Pull random numbers from the hat
        For x = 1 To (Asc(Mid$(PasswordKey, Counter, 1)) * 2)
            temp = Rnd
        Next x
    Next z
    Close #1
    Close #2

End Sub

Private Sub Command1_Click()

Dim InputFile As String
Dim OutputFile As String
Dim PasswordKey As String

InputFile = InputBox("Enter thr filename to encode/decode")
OutputFile = _
    InputBox("Enter the new filename this file will become")
```

```

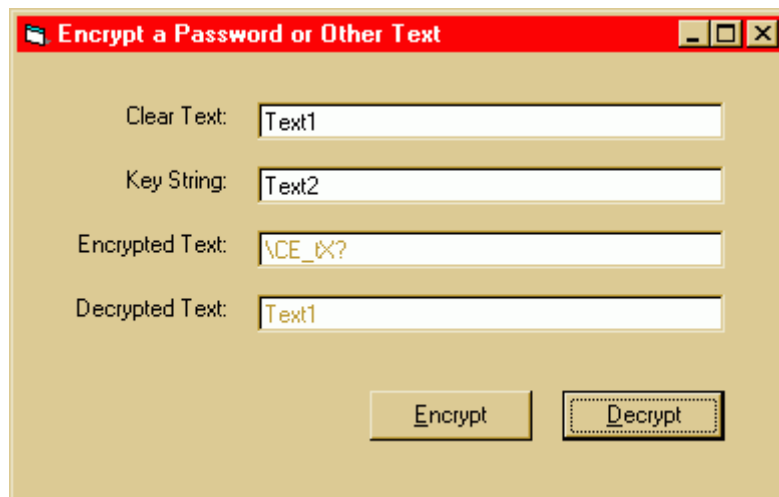
PasswordKey = InputBox("Enter the password")

Call FileEncodeAndDecode(InputFile, OutputFile, PasswordKey)

MsgBox "File written to " + OutputFile
End
End Sub

```

کلاسی برای رمزگذاری رشته ها :



```
Option Explicit
```

```

Private Sub cmdEncrypt_Click()
    Dim cipherTest As New Cipher
    cipherTest.KeyString = txtKey.Text
    cipherTest.Text = txtClear.Text
    cipherTest.DoXor
    cipherTest.Stretch
    txtEncrypted.Text = cipherTest.Text
End Sub

```

```

Private Sub cmdDecrypt_Click()
    Dim cipherTest As New Cipher
    cipherTest.KeyString = txtKey.Text
    cipherTest.Text = txtEncrypted.Text
    cipherTest.Shrink
    cipherTest.DoXor
    txtDecrypted.Text = cipherTest.Text
End Sub

```

```
'CIPHER.CLS
```

```
Option Explicit
```

```

Private mstrKey As String
Private mstrText As String

```

```

'~~~.KeyString
'A string (key) used in encryption and decryption
Public Property Let KeyString(strKey As String)
    mstrKey = strKey
    Initialize
End Property

'~~~.Text
'Write text to be encrypted or decrypted
Public Property Let Text(strText As String)
    mstrText = strText
End Property

'Read text that was encrypted or decrypted
Public Property Get Text() As String
    Text = mstrText
End Property

'~~~.DoXor
'Exclusive-or method to encrypt or decrypt
Public Sub DoXor()
    Dim lngC As Long
    Dim intB As Long
    Dim lngN As Long
    For lngN = 1 To Len(mstrText)
        lngC = Asc(Mid(mstrText, lngN, 1))
        intB = Int(Rnd * 256)
        Mid(mstrText, lngN, 1) = Chr(lngC Xor intB)
    Next lngN
End Sub

'~~~.Stretch
'Convert any string to a printable, displayable string
Public Sub Stretch()
    Dim lngC As Long
    Dim lngN As Long
    Dim lngJ As Long
    Dim lngK As Long
    Dim lngA As Long
    Dim strB As String
    lngA = Len(mstrText)
    strB = Space(lngA + (lngA + 2) \ 3)
    For lngN = 1 To lngA
        lngC = Asc(Mid(mstrText, lngN, 1))
        lngJ = lngJ + 1
        Mid(strB, lngJ, 1) = Chr((lngC And 63) + 59)
        Select Case lngN Mod 3
            Case 1
                lngK = lngK Or ((lngC \ 64) * 16)
            Case 2
                lngK = lngK Or ((lngC \ 64) * 4)
            Case 0
                lngK = lngK Or (lngC \ 64)
                lngJ = lngJ + 1
                Mid(strB, lngJ, 1) = Chr(lngK + 59)
                lngK = 0
        End Select
    Next lngN
    If lngA Mod 3 Then

```

```

        lngJ = lngJ + 1
        Mid(strB, lngJ, 1) = Chr(lngK + 59)
    End If
    mstrText = strB
End Sub

'~~~~.Shrink
'Inverse of the Stretch method;
'result can contain any of the 256-byte values
Public Sub Shrink()
    Dim lngC As Long
    Dim lngD As Long
    Dim lngE As Long
    Dim lngA As Long
    Dim lngB As Long
    Dim lngN As Long
    Dim lngJ As Long
    Dim lngK As Long
    Dim strB As String
    lngA = Len(mstrText)
    lngB = lngA - 1 - (lngA - 1) \ 4
    strB = Space(lngB)
    For lngN = 1 To lngB
        lngJ = lngJ + 1
        lngC = Asc(Mid(mstrText, lngJ, 1)) - 59
        Select Case lngN Mod 3
            Case 1
                lngK = lngK + 4
                If lngK > lngA Then lngK = lngA
                lngE = Asc(Mid(mstrText, lngK, 1)) - 59
                lngD = ((lngE \ 16) And 3) * 64
            Case 2
                lngD = ((lngE \ 4) And 3) * 64
            Case 0
                lngD = (lngE And 3) * 64
                lngJ = lngJ + 1
        End Select
        Mid(strB, lngN, 1) = Chr(lngC Or lngD)
    Next lngN
    mstrText = strB
End Sub

'Initializes random numbers using the key string
Private Sub Initialize()
    Dim lngN As Long
    Randomize Rnd(-1)
    For lngN = 1 To Len(mstrKey)
        Randomize Rnd(-Rnd * Asc(Mid(mstrKey, lngN, 1)))
    Next lngN
End Sub

```