**Option Explicit**

**Sub sortbycrime(num As Integer)**

Dim f As Integer

Dim b As Integer

Dim temp As Pris

For f = 1 To num - 1

For b = f + 1 To num

If arrpris(f).Crime > arrpris(b).Crime Then

temp = arrpris(f)

arrpris(f) = arrpris(b)

arrpris(b) = temp

End If

Next b

Next f

**End Sub**

**Sub binsearchcell(num As Integer, si As Integer)**

Dim low As Integer, high As Integer

Dim md As Integer, pos As Integer

sortbycell num

pos = 0

low = 1

high = num

Do While low <= high

md = Int((low + high) / 2)

If si > arrpris(md).CBlock Then

low = md + 1

ElseIf si < arrpris(md).CBlock Then

high = md - 1

Else

pos = md

Exit Do

End If

Loop

If pos = 0 Then

lblsearch = "Doesn't Exist"

Else

With arrpris(pos)

lblsearch = Str(pos) + " - " + Str(.Idnum) + " - " + .Crime + " " + .Gender + " " + Str(.CBlock) + " " + Str(.Sentence)

End With

End If

**End Sub**

**Sub sortbycell(num As Integer)**

Dim f As Integer

Dim b As Integer

Dim temp As Pris

For f = 1 To num - 1

For b = f + 1 To num

If arrpris(f).CBlock > arrpris(b).CBlock Then

temp = arrpris(f)

arrpris(f) = arrpris(b)

arrpris(b) = temp

End If

Next b

Next f

**End Sub**

**Private Sub cmdbinsearchcell\_Click()**

Dim item As Integer

item = Val(InputBox("Enter cell block", "Search Cell Block", "0"))

binsearchcell 5000, item

**End Sub**

**Private Sub cmdfill\_Click()**

Randomize

Dim r As Integer

For i = 1 To 5000

With arrpris(i)

.Idnum = Int(Rnd \* 8999) + 1000

.Crime = Chr(Int(Rnd \* 26) + 65)

r = Int(Rnd \* 2) + 1

If r = 1 Then

.Gender = "M"

Else

.Gender = "F"

End If

.CBlock = Int(Rnd \* 50) + 1

.Sentence = (Rnd \* 30)

lstall.AddItem Str(.Idnum) + " - " + .Crime + " " + .Gender + " " + Str(.CBlock) + " " + Str(.Sentence)

End With

Next i

**End Sub**

**Private Sub cmdsortbycell\_Click()**

sortbycell 5000

lstall.Clear

For i = 1 To 5000

With arrpris(i)

lstall.AddItem Str(i) + vbTab + Str(.Idnum) + " - " + .Crime + " " + .Gender + " " + Str(.CBlock) + " " + Str(.Sentence)

End With

Next i

**End Sub**

**Private Sub cmdsortcrime\_Click()**

sortbycrime 5000

lstall.Clear

For i = 1 To 5000

With arrpris(i)

lstall.AddItem Str(i) + vbTab + Str(.Idnum) + " - " + .Crime + " " + .Gender + " " + Str(.CBlock) + " " + Str(.Sentence)

End With

Next i

**End Sub**