RESOLUCION EJERCICIO MATRIZ CUADRADA (RECORRIDO COMPLETO)

```vb
Module Module1

    Sub Main()
        Dim mat(3, 3) As Integer
        Dim I, j As Integer
        For I = 0 To 3
            For j = 0 To 3
                Console.WriteLine("INGRESE UN NRO fila {0} columna {1}: ", I, j)
                mat(I, j) = CInt(Console.ReadLine())
            Next
        Next
        Console.WriteLine()
        Console.WriteLine("Elementos de la diagonal principal")
        Console.WriteLine()
        For I = 0 To 3
            For j = 0 To 3
                If I = j Then
                    Console.WriteLine(mat(I, I))
                End If
            Next

        Next
        Console.WriteLine()
        Console.WriteLine("Elementos encima de la diagonal principal")
        Console.WriteLine()
        For I = 0 To 3
            For j = 0 To 3
                If I < j Then
                    Console.WriteLine(mat(I, j))
                End If
            Next
        Next
        Console.WriteLine()
        Console.WriteLine("Elementos debajo de la diagonal principal")
        Console.WriteLine()
        For I = 0 To 3
            For j = 0 To 3
                If I > j Then
                    Console.WriteLine(mat(I, j))
                End If
            Next
```

```vbnet
            Next
        Console.WriteLine()
        Console.WriteLine("Elementos de la contradiagonal")
        Console.WriteLine()
        For I = 0 To 3
            For j = 0 To 3
                If I + j = mat.GetLength(0) Then
                    Console.WriteLine(mat(I, j))
                End If
            Next
        Next
        Console.WriteLine()
        Console.WriteLine("Elementos encima de la contradiagonal")
        Console.WriteLine()
        For I = 0 To 3
            For j = 0 To 3
                If I + j < mat.GetLength(0) Then
                    Console.WriteLine(mat(I, j))
                End If
            Next
        Next
        Console.WriteLine()
        Console.WriteLine("Elementos debajo de la contradiagonal")
        Console.WriteLine()
        For I = 0 To 3
            For j = 0 To 3
                If I + j > mat.GetLength(0) Then
                    Console.WriteLine(mat(I, j))
                End If
            Next
        Next
        Console.ReadLine()
    End Sub

End Module
```

RESOLUCION EJERCICIO MATRIZ CUADRADA (RECORRIDO ACOTADO)

```vbnet
Module Module1

    Sub Main()
```

```vbnet
Dim mat(3, 3) As Integer
Dim I, j As Integer
For I = 0 To 3
    For j = 0 To 3
        Console.WriteLine("INGRESE UN NRO fila {0} columna {1}: ", I, j)
        mat(I, j) = CInt(Console.ReadLine())
    Next
Next
Console.WriteLine()
Console.WriteLine("Elementos de la diagonal principal")
Console.WriteLine()
For I = 0 To 3
    Console.WriteLine(mat(I, I))
Next
Console.WriteLine()
Console.WriteLine("Elementos encima de la diagonal principal")
Console.WriteLine()
For I = 0 To 2
    For j = I + 1 To 3
        Console.WriteLine(mat(I, j))
    Next
Next
Console.WriteLine()
Console.WriteLine("Elementos debajo de la diagonal principal")
Console.WriteLine()
For I = 0 To 3
    For j = 0 To I - 1
        Console.WriteLine(mat(I, j))
    Next
Next
Console.WriteLine()
Console.WriteLine("Elementos de la contradiagonal")
Console.WriteLine()
For I = 0 To 3
    Console.WriteLine(mat(I, 3 - I))
Next
Console.WriteLine()
Console.WriteLine("Elementos encima de la contradiagonal")
Console.WriteLine()
For I = 0 To 2
    For j = 0 To 2 - I
        Console.WriteLine(mat(I, j))
    Next
Next
Console.WriteLine()
Console.WriteLine("Elementos debajo de la contradiagonal")
Console.WriteLine()
```

```
        For I = 1 To 3
            For j = 4 - I To 3
                Console.WriteLine(mat(I, j))
            Next
        Next
        Console.ReadLine()
    End Sub

End Module
```