```vb
Module Module1

    Sub Main()

        'Insert code here

    End Sub
    Class BinaryWord
        Private BitStream As String
        Private Mantissa As Double
        Private Exponent As Integer
        Private RealNumber As Double
        Public Sub InputBitStream()
            Dim ValidPattern As Boolean
            Console.Write("Enter a 12 bit word: ")
            Do
                Do
                    BitStream = Console.ReadLine
                    If Len(BitStream) <> 12 Then Console.Write("That was not 12 bits. Enter again: ")
                Loop Until Len(BitStream) = 12
                ValidPattern = True
                For counter = 0 To 11
                    If BitStream(counter) <> "0" And BitStream(counter) <> "1" Then ValidPattern = False
                Next
                If Not ValidPattern Then Console.Write("That was not a binary word. Enter again: ")
            Loop Until ValidPattern
        End Sub
        Public Sub ExtractMantissa()
            Mantissa = 0
            For counter = 0 To 7
                Mantissa = Mantissa + Val(BitStream(counter)) * Math.Pow(2, (-1 * counter))
            Next
        End Sub
        Public Sub ExtractExponent()

            'Insert code here

        End Sub
        Public Sub ApplyExponent()

            'Insert code here

        End Sub
        Public Sub OutputRealNumber()
            Console.WriteLine(RealNumber)
            Console.ReadLine()
        End Sub
    End Class

End Module
```