‘ To test the DateDiff function’s ability to number days well.

‘ Output = 8 days

Dim days As Integer

Dim actualDays As Integer

Dim nowDays As Integer

'Get amount of TOTAL days in the interval = days + 1

'NOTE: Now command is not accurate

days = DateDiff("d", Now, "1 January")

actualDays = days + 1

nowDays = days + 2

Console.WriteLine("Diff Days are: " & days)

Console.WriteLine("Actual Days are: " & actualDays)

Console.WriteLine("Now days are: " & nowDays)

'Use select case to convert month from a number to a word

Select Case monthOfBirthInt

Case 1

monthOfBirthName = "January"

Case 2

monthOfBirthName = "February"

Case 3

monthOfBirthName = "March"

Case 4

monthOfBirthName = "April"

Case 5

monthOfBirthName = "May"

Case 6

monthOfBirthName = "June"

Case 7

monthOfBirthName = "July"

Case 8

monthOfBirthName = "August"

Case 9

monthOfBirthName = "September"

Case 10

monthOfBirthName = "October"

Case 11

monthOfBirthName = "November"

Case 12

monthOfBirthName = "December"

End Select

COPY OF PROGRAM:

' Comment block

Imports System.Collections.Hashtable

Module Module1

Class InvalidMonthException : Inherits Exception

Sub New(ByVal message As String)

MyBase.New(message)

End Sub

End Class

Function getUserBirthDateAsString()

'Declarations for birthdate information

Dim dayOfBirth As Integer

Dim monthOfBirth As Integer

'Dim monthOfBirthName As String = " "

Dim givenYearOfBirth As Integer

Dim adjustedYearOfBirth As Integer

Dim numberOfTries As Integer

'Declarations for hashtable

'Dim month As Hashtable = New Hashtable

'Instructions

Console.WriteLine("Instructions: to find your age, follow the guidelines to input your full birthdate.")

Console.WriteLine()

Console.ReadLine()

' DEALING WITH DAY

Console.WriteLine("Input the day you were born ")

dayOfBirth = Console.ReadLine()

'DEALING WITH MONTH

Console.WriteLine("Input the month (in number form) you were born ")

monthOfBirth = Console.ReadLine()

' If month is not between 1 and 12 and tries is less than 3, tell user.

While ((monthOfBirth < 1 And monthOfBirth > 12) And numberOfTries < 3)

Console.WriteLine("The month you entered is invalid")

numberOfTries = numberOfTries + 1

End While

' Throw exception after three tries.

If (numberOfTries = 3) Then

Throw (New InvalidMonthException("Number of tries expired"))

End If

'DEALING WITH YEAR

Console.WriteLine("...and finally write the year")

givenYearOfBirth = Console.ReadLine()

'Adjust year to compensate for DateDiff function, which only calculates number of days between given dates.

adjustedYearOfBirth = givenYearOfBirth + 1

'Return the birthDate as a string, which is the argument of calculateAgeFromBirthDate()

Return dayOfBirth & monthOfBirth & adjustedYearOfBirth

End Function

Function calculateAgeFromBirthDate(ByVal birthDate As Date)

Dim daysBetweenDates As Long

Dim actualDays As Integer

Dim nowDate As Date

'Find the number of days between the dates

'Month must be converted to word form

daysBetweenDates = DateDiff("y", birthDate, nowDate)

'Adjust the number to get actual number of days

actualDays = daysBetweenDates + 1

Return actualDays / 365

End Function

Sub Main()

Dim age As Integer

Try

'Get age

age = calculateAgeFromBirthDate(getUserBirthDateAsString())

Console.WriteLine("You are " & age & " years old")

Catch ex As InvalidMonthException

Console.WriteLine(ex.Message)

Finally

Console.WriteLine()

Console.WriteLine("Thanks for participating")

End Try

Console.ReadKey()

End Sub

End Module

Year 2010: <http://en.wikipedia.org/wiki/2010s#Architecture>

20th and 21st centuries: <http://ehistory.osu.edu/world/timeline.cfm>

EVENTS:

DECADE 1900:

* 1908 - Austria-Hungary's annexation of Bosnia-Herzegovina leads to the Bosnian Crisis, which ultimately causes the first World War.

DECADE 1910:

* 1913 – Romania gains land, such as Serbia, Greece, and Bulgaria, with Treaty of Bucharest while under the Ottoman Empire.
* 1918: [Germany calls for peace, signaling the end of World War I](http://ehistory.osu.edu/world/WarView.Cfm?WID=4)

DECADE 1920:

* 1921 – The famous Picasso paints his *Three Musicians*

DECADE 1930: 1

* Thomas Edison, inventor of the incandescent light-bulb, dies in 1931 and Franklin D. Roosevelt becomes president of the United States in 1932.

DECADE 1940:

* 1939 to 1945 – Einstein discovers the potential of an atom as a nuclear bomb. Once he sends the information to U.S. President Roosevelt to use as a weapon in World War II, the president orders the building of the first bomb under “The Manhattan Project.”
* World War II ends and Hitler is defeated, but the Hiroshima and Nagasaki nuclear explosions in Japan caused serious damage

DECADE 1950:

* The first airplane lands at the North Pole in 1952 and Einstein dies on April 18, 1955.

DECADE 1960:

* July 20, 1969 – “One giant leap for mankind….” Apollo 11 lands on the moon.
* On November 12, 1961, the Romanian gymnast Nadia Comaneci, is born and on July 20, 1969, Apollo 11 lands on the moon.
* In 1960, American writer Harper Lee finishes his novel titled How To Kill a Mockingbird.

DECADE 1970:

* 1979 – Margaret Thatcher becomes the first female president of Britain
* 1976 – Agatha Christie, a famous mystery novel writer, dies in 1976.

DECADE 1980:

* 1985 – Around 1985, the hole in ozone layer is found, and the titanic is discovered at the bottom of the ocean.
* 1986 – Chernobyl nuclear accident endangers millions

DECADE 1990:

* Mother Theresa, a nun who dedicated her life tohelping the poor in India, dies.

DECADE 2000:

* 2003 – former U.S. poet laureate Josephine Jacobsen, dies

DECADE 2010:

* Upon completion in 2010, Burj Khalifa becomes the world’s tallest building.