**KING SAUD UNIVERSITY**

**College of Applied Studies and Community Service**

**CT1411**

**Tutorial 2**

1. Write a LINQ query that squares all the elements of an array that contains the even integers from 2 to 20.
2. Write a LINQ query that selects all the 7s in an array that contains 7, 2, 7, 5, 5, 7, 9, 1, 4, 3, 7, 7, 1, 2, 6. Then determine how many elements are in the result.
3. Trace:

Dim numbers =

From n In Enumerable.Range(100, 20)

Select Number = n, OddEven = If(n Mod 2 = 1, "odd", "even")

For Each n In numbers

Console.WriteLine("The number {0} is {1}.", n.Number, n.OddEven)
Next

1. Trace:

Dim words() = {"cherry", "apple", "blueberry"}

    Dim sortedWords = From w In words \_
        Order By w

    Console.WriteLine("The sorted list of words:")
    For Each w In sortedWords
        Console.WriteLine(w)
    Next

1. Trace:

Dim words() = {"cherry", "apple", "blueberry"}

    Dim sortedWords = From w In words
        Select w
        Order By w.Length

    Console.WriteLine("The sorted list of words:")
    For Each w In sortedWords
        Console.WriteLine(w)
    Next

1. Trace:

Dim doubles() = {1.7, 2.3, 1.9, 4.1, 2.9}

    Dim sortedDoubles = From d In doubles
        Select d
        Order By d Descending

    For Each d In sortedDoubles
        Console.WriteLine(d)
    Next

1. Trace:

Dim digits() = {"zero", "one", "two", "three", "four", "five", "six", "seven", "eight", "nine"}

    Dim reversedIDigits = (From d In digits
        Where d(1) = "i"
        Select d.Reverse()

       For Each d In reversedIDigits
        Console.WriteLine(d)
    Next