**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