**LINQ Standard Query Operators**also called as **LINQ extension methods**can be broadly classified into the following categories  
Aggregate Operators  
Grouping Operators  
Restriction Operators  
Projection Operators  
Set Operators  
Partitioning Operators  
Conversion Operators  
Element Operators  
Ordering Operators  
Generation Operators  
Query Execution  
Join Operators  
Custom Sequence Operators  
Quantifiers Operators  
Miscellaneous Operators   
  
   
  
In this video we will discuss the following **LINQ Aggregate**Operators  
Min  
Max  
Sum  
Count  
Average  
Aggregate (**Next Video**)  
  
**Example 1:**

using System;

using System.Linq;

namespace Demo

{

    class Program

    {

        static void Main()

        {

            int[] Numbers = { 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 };

            int smallestNumber = Numbers.Min();

            int smallestEvenNumber = Numbers.Where(n => n % 2 == 0).Min();

            int largestNumber = Numbers.Max();

            int largestEvenNumber = Numbers.Where(n => n % 2 == 0).Max();

            int sumOfAllNumbers = Numbers.Sum();

            int sumOfAllEvenNumbers = Numbers.Where(n => n % 2 == 0).Sum();

            int countOfAllNumbers = Numbers.Count();

            int countOfAllEvenNumbers = Numbers.Where(n => n % 2 == 0).Count();

            double averageOfAllNumbers = Numbers.Average();

            double averageOfAllEvenNumbers = Numbers.Where(n => n % 2 == 0).Average();

            Console.WriteLine("Smallest Number = " + smallestNumber);

            Console.WriteLine("Smallest Even Number = " + smallestEvenNumber);

            Console.WriteLine("Largest Number = " + largestNumber);

            Console.WriteLine("Largest Even Number = " + largestEvenNumber);

            Console.WriteLine("Sum of All Numbers = " + sumOfAllNumbers);

            Console.WriteLine("Sum of All Even Numbers = " + sumOfAllEvenNumbers);

            Console.WriteLine("Count of All Numbers = " + countOfAllNumbers);

            Console.WriteLine("Count of All Even Numbers = " + countOfAllEvenNumbers);

            Console.WriteLine("Average of All Numbers = " + averageOfAllNumbers);

            Console.WriteLine("Average of All Even Numbers = " + averageOfAllEvenNumbers);

        }

    }

}

**Example 2:**

using System;

using System.Linq;

namespace Demo

{

    class Program

    {

        static void Main()

        {

            string[] countries = { "India", "USA", "UK" };

            int minCount = countries.Min(x => x.Length);

            int maxCount = countries.Max(x => x.Length);

            Console.WriteLine

                   ("The shortest country name has {0} characters in its name", minCount);

            Console.WriteLine

                   ("The longest country name has {0} characters in its name", maxCount);

        }

    }

}