// LINQ Language Integrated Query Language

SQL > Language that we use to work with RDBMS

C# > programming Language

LINQ > Query Language that can be used to query any collection or Arrays

LINQ : Syntax

Select \* from tablename

From x in collection /array name

Select x;

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApp1

{

class Program

{

static void Main(string[] args)

{

// LINQ Language Integrated Query Language

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

//for(int i=0;i<num.Length;i++)

//{

// Console.WriteLine(num[i]);

//}

//foreach(int x in num)

// Console.WriteLine(x);

// LINQ

var data = from temp in num

select temp;

foreach (int x in data)

Console.WriteLine(x);

string[] names = new string[] { "Ajay", "Deepak" };

var data1 = from x in names

select x;

foreach (string x in data1)

Console.WriteLine(x);

List<int> list = new List<int>()

{ 1,2,3,4,5,6,7,8};

data = from x in list

select x;

data = from x in list

where x % 2 == 0

select x;

Console.WriteLine("Even no's");

foreach (int x in data)

Console.WriteLine(x);

// Get all Even nos'

for (int i = 0;i<num.Length;i++)

{

if(num[i]%2==0)

{

Console.WriteLine(num[i]);

}

}

// LINQ

data = from x in num

where x % 2 == 0

select x;

//Console.WriteLine("Even no's");

//foreach(int x in data)

// Console.WriteLine(x);

// Sum of all elements

var sum = (from x in num

select x).Sum();

Console.WriteLine("Sum is " + sum);

var max = (from x in num

select x).Max();

Console.WriteLine("Max No is " + max);

var min = (from x in num

select x).Min();

Console.WriteLine("Min no is " + min);

List<string> Names = new List<string>()

{

"Ajay", "Deepak","Pawan"

};

var listOfNames = from x in Names

where x.Length > 5

select x;

foreach(string x in listOfNames)

Console.WriteLine(x);

listOfNames = from x in Names

where x.Contains('w')

select x;

foreach (string x in listOfNames)

Console.WriteLine(x);

}

}

}

Eager Loading

Lazy Loading