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**Assign : CSharp LinQ Assign**

using System;

using System.Collections.Generic;

using System.Linq;

namespace LinqAssign1

{

class Employee

{

public int EmployeeID { get; set; }

public string FirstName { get; set; }

public string LastName { get; set; }

public string Title { get; set; }

public DateTime DOB { get; set; }

public DateTime DOJ { get; set; }

public string City { get; set; }

}

class Program

{

public static List<Employee> empList = new List<Employee>

{

new Employee() {EmployeeID = 1001,FirstName = "Malcolm",LastName = "Daruwalla",Title = "Manager",DOB = DateTime.Parse("02/01/1984"),DOJ = DateTime.Parse("09/08/2011"),City = "Mumbai"},

new Employee() {EmployeeID = 1002,FirstName = "Asdin",LastName = "Dhalla",Title = "AsstManager",DOB = DateTime.Parse("20/08/1984"),DOJ = DateTime.Parse("7/7/2012"),City = "Mumbai"},

new Employee() {EmployeeID = 1003,FirstName = "Madhavi",LastName = "Oza",Title = "Consultant",DOB = DateTime.Parse("14/11/1987"),DOJ = DateTime.Parse("12/4/2015"),City = "Pune"},

new Employee() {EmployeeID = 1004,FirstName = "Saba",LastName = "Shaikh",Title = "SE",DOB = DateTime.Parse("6/3/1990"),DOJ = DateTime.Parse("2/2/2016"),City = "Pune"},

new Employee() {EmployeeID = 1005,FirstName = "Nazia",LastName = "Shaikh",Title = "SE",DOB = DateTime.Parse("3/8/1991"),DOJ = DateTime.Parse("2/2/2016"),City = "Mumbai"},

new Employee() {EmployeeID = 1006,FirstName = "Suresh",LastName = "Pathak",Title = "Consultant",DOB = DateTime.Parse("11/7/1989"),DOJ = DateTime.Parse("8/8/2014"),City = "Chennai"},

new Employee() {EmployeeID = 1007,FirstName = "Vijay",LastName = "Natrajan",Title = "Consultant",DOB = DateTime.Parse("12/2/1989"),DOJ = DateTime.Parse("6/1/2015"),City = "Mumbai"},

new Employee() {EmployeeID = 1008,FirstName = "Rahul",LastName = "Dubey",Title = "Associate",DOB = DateTime.Parse("11/11/1993"),DOJ = DateTime.Parse("11/6/2014"),City = "Chennai"},

new Employee() {EmployeeID = 1009,FirstName = "Amit",LastName = "Mistry",Title = "Associate",DOB = DateTime.Parse("8/12/1992"),DOJ = DateTime.Parse("12/3/2014"),City = "Chennai"},

new Employee() {EmployeeID = 1010,FirstName = "Sumit",LastName = "Shah",Title = "Manager",DOB = DateTime.Parse("4/12/1991"),DOJ = DateTime.Parse("1/2/2016"),City = "Pune"},

};

static void Main(string[] args)

{

DisplayAllEmp();

//Notmumbai();

//TitleAsstMngr();

//LastNameStartsWithS();

//EmpDoBAfterDate();

//EmpDojBeforeDate();

//DesgntnDetail();

//EmpListCount();

//EmpCityChennai();

//EmpHighestID();

//EmpDojAfterYear();

//EmpTitleNotAssoc();

//EmpDetailOnCity();

//EmpDetailCityAndTitle();

//EmployeeYoungest();

Console.ReadKey();

}

public static void DisplayAllEmp()

{

var dispemp = (from Emp in empList select Emp);

foreach (var emp in dispemp)

{

Console.WriteLine(emp.EmployeeID + " " + emp.FirstName + " " + emp.LastName + " " + emp.Title + " " + emp.DOB + " " + emp.DOJ + " " + emp.City);

}

}

public static void Notmumbai()

{

var NotMumbaiList = from emp in empList where emp.City != "Mumbai" select emp;

foreach (var emp in NotMumbaiList)

{

Console.WriteLine(emp.EmployeeID + " " + emp.FirstName + " " + emp.LastName + " " + emp.Title + " " + emp.DOB + " " + emp.DOJ + " " + emp.City);

}

}

public static void TitleAsstMngr()

{

var DispTitleAsstMngrLst = from emp in empList where emp.Title == "AsstManager" select emp;

foreach (var emp in DispTitleAsstMngrLst)

{

Console.WriteLine(emp.EmployeeID + " " + emp.FirstName + " " + emp.LastName + " " + emp.Title + " " + emp.DOB + " " + emp.DOJ + " " + emp.City);

}

}

public static void LastNameStartsWithS()

{

var LastNameWithS = from emp in empList where emp.LastName.StartsWith("S") select emp;

foreach (var emp in LastNameWithS)

{

Console.WriteLine(emp.EmployeeID + " " + emp.FirstName + " " + emp.LastName + " " + emp.Title + " " + emp.DOB + " " + emp.DOJ + " " + emp.City);

}

}

public static void EmpDoBAfterDate()

{

var EmpDoBAfter = from emp in empList where emp.DOB > DateTime.Parse("6/1/1990") select emp;

foreach (var emp in EmpDoBAfter)

{

Console.WriteLine(emp.EmployeeID + " " + emp.FirstName + " " + emp.LastName + " " + emp.Title + " " + emp.DOB + " " + emp.DOJ + " " + emp.City);

}

}

public static void EmpDojBeforeDate()

{

var EmpDojBeforeDateList = from emp in empList where emp.DOJ < DateTime.Parse("6/1/2015") select emp;

foreach (var emp in EmpDojBeforeDateList)

{

Console.WriteLine(emp.EmployeeID + " " + emp.FirstName + " " + emp.LastName + " " + emp.Title + " " + emp.DOB + " " + emp.DOJ + " " + emp.City);

}

}

public static void DesgntnDetail()

{

var DesignationList = from emp in empList where emp.Title == "Consultant" || emp.Title == "Associate" select emp;

foreach (var emp in DesignationList)

{

Console.WriteLine(emp.EmployeeID + " " + emp.FirstName + " " + emp.LastName + " " + emp.Title + " " + emp.DOB + " " + emp.DOJ + " " + emp.City);

}

}

public static void EmpListCount()

{

var EmpList = from emp in empList select emp;

Console.WriteLine("Total no of Employees in EmpList" + EmpList.Count());

}

public static void EmpCityChennai()

{

var EmpCityChennaiList = from emp in empList where emp.City == "Chennai" select emp;

foreach (var emp in EmpCityChennaiList)

{

Console.WriteLine(emp.EmployeeID + " " + emp.FirstName + " " + emp.LastName + " " + emp.Title + " " + emp.DOB + " " + emp.DOJ + " " + emp.City);

}

}

public static void EmpHighestID()

{

var EmpHighid = (from emp in empList select emp.EmployeeID).Max();

Console.WriteLine("Highest Employee ID in EmplList is : " + EmpHighid);

}

public static void EmpDojAfterYear()

{

var EmpDojAfterCount = from emp in empList where emp.DOJ > DateTime.Parse("1/1/2015") select emp;

Console.WriteLine("Total no of Employees Whose Doj after 1/1/2015 are : " + EmpDojAfterCount.Count());

}

public static void EmpTitleNotAssoc()

{

var EmpTitleNotAssocCount = from emp in empList where emp.Title != "Associate" select emp;

Console.WriteLine("Total no of Employees Whose Title is not Associate are : " + EmpTitleNotAssocCount.Count());

}

public static void EmpDetailOnCity()

{

var EmpCityCount = from emp in empList group emp by emp.City into emp1 select emp1;

Console.WriteLine("Total no of Employee Details based on City is : " + EmpCityCount.Count());

}

public static void EmpDetailCityAndTitle()

{

var EmpCityTitleCount = from emp in empList group emp by new { emp.City, emp.Title } into emp1 select emp1;

Console.WriteLine("Total no of Employee Details based on City and Title is : " + EmpCityTitleCount.Count());

}

public static void EmployeeYoungest()

{

var youngEmpCount = (from emp in empList select emp.DOB).Max();

Console.WriteLine(" Employee Who is Youngest is : " + youngEmpCount);

}

}

}

OutPut

