using System;

using System.Collections.Generic;

using System.ComponentModel.Design;

using System.Linq;

using System.Reflection;

using System.Runtime.InteropServices;

using System.Text;

using System.Threading.Tasks;

namespace AssignementEmployee15nov

{

public class Employee

{

public int EmployeeId { get; set; }

public string FirstName { get; set; }

public string LastName { get; set; }

public string Title { get; set; }

public string DOB { get; set; }

public string DoJ { get; set; }

public string City { get; set; }

public Employee(int EmployeeId,string FirstName,string LastName,string Title, string DOB, string Doj, string City)

{

this.EmployeeId = EmployeeId;

this.FirstName= FirstName;

this.LastName= LastName;

this.Title= Title;

this.DOB= DOB;

this.DoJ= Doj;

this.City= City;

}

public override string ToString()

{

return EmployeeId + " " + FirstName+" " + LastName + " " + Title + " " + DOB + " " + DoJ + " " + " " + City;

}

}

internal class Program

{

static void Main()

{//new DateTime(2015, 12, 20);

List<Employee> list = new List<Employee>

{

new Employee(1001,"Malcolm","Daruwalla","Manager","1984/11/16","2011/06/08","Mumbai"),

new Employee(1002,"Asdin" ,"Dahlla" ,"AsstManager","1984/08/20","2012/07/07","Mumbai"),

new Employee(1003,"Madahvi", "Oza" ,"Consultant","1987/11/14","2015/04/2015","Pune"),

new Employee(1004,"Saba" , "Saikh" ,"SE","1990/11/14","2015/04/12","Pune"),

new Employee(1005,"Nazia" , "Shaikh","SE","1991/03/08","2016/02/02","Mumbai"),

new Employee(1006,"Amit" , "Pathak" ,"Consultant", "1998/11/07","2014/08/08","Chennai"),

new Employee(1007,"Vijay" , "Natrajan","Consultant","1998/12/02","2015/06/01","Mumbai"),

new Employee(1008,"Rahul" , "Dubey" ,"Associate","1993/11/11","2014/11/06","Chennai"),

new Employee(1009,"Suresh", "Mistry" ,"Associate","1992/08/12","2014/13/03","Chennai"),

new Employee(1010,"Sumit" ,"Shah" ,"Manager","1991/04/12","2016/01/02","Pune")

};

Console.WriteLine("a. Display details of all Employees. ");

IEnumerable<Employee> result = from x in list select x;

foreach (Employee e in result)

{

Console.WriteLine(e);

}

Console.WriteLine("====================");

//foreach(Employee emp in list)

//{

// //Console.WriteLine("{0}\t{1}\t{2}\t{3}\t{4}\t{5}\t{6}", emp.EmployeeId, emp.FirstName, emp.LastName, emp.Title, emp.DOB, emp.DoJ , emp.City);

// Console.WriteLine(emp.ToString());

//}

Console.WriteLine("b. Display details of all Employee whose location is not Mumbai.");

var query2 = from x2 in list where x2.City != "Mumbai" select x2;

foreach (Employee e1 in query2)

{

Console.WriteLine(e1);

}

Console.WriteLine("====================");

Console.WriteLine("c. Display details of all Employee whose Tittle is AsstManager ");

var query3 = from x3 in list where x3.Title.Equals("AsstManager") select x3;

foreach (Employee e2 in query3)

{

Console.WriteLine(e2);

}

Console.WriteLine("====================");

Console.WriteLine("d.Display details of all Employee whose LastName Start ith S");

var query4 = from x4 in list where x4.LastName.StartsWith("S")select x4;

foreach (Employee e3 in query4)

{

Console.WriteLine(e3);

}

Console.WriteLine("====================");

Console.WriteLine("e.Display details of all Employee whose have joined before 1/1/2015" );

//IEnumerable<Employee> result = from x in list select x;

//var query5 = from x5 in list where x5.DoJ.Contains("2015/1/1") select x5;

//foreach (Employee e4 in query5)

//{

// Console.WriteLine(e4);

//}

Console.WriteLine("\n");

//var date = DateTime.ConvertTo.Int32(from x5 in list select x5.DoJ);

//Console.ReadLine();

Console.WriteLine("====================");

Console.WriteLine("g. Display list of all employee whose designation is Consultant & Associative");

var query8 = from x7 in list where x7.Title.Contains( "Consultant") || x7.Title.Contains("Associate") select x7;

foreach (Employee e7 in query8)

{

Console.WriteLine(e7);

}

Console.WriteLine("====================");

Console.WriteLine("h. Display total number of Employee");

//Syntax method

int No\_Of\_Employee = list.Count();

//query Syntax

int No\_of\_Employee2 = (from x in list select x).Count();

Console.WriteLine(No\_Of\_Employee);

Console.WriteLine(No\_of\_Employee2);

Console.WriteLine("====================");

Console.WriteLine("i. Display total number belonging to Chennai ");

// syntax Method

int query9h = list.Where (x1=>x1.City.Equals("Chennai")).Count();

Console.WriteLine(query9h);

int query9= (from xz in list where xz.City.Equals("Chennai")select xz).Count();

Console.WriteLine(query9);

Console.WriteLine("====================");

Console.WriteLine("j. Display Highest Employee Id in List");

Console.WriteLine(" --Syntax Method--");

var a= list.Max(x3 => x3.EmployeeId);

Console.WriteLine(a);

// int query\_j = (list.Where(x2 =>x2.EmployeeId).select x2).Max();

int query10 = (from xy in list select xy.EmployeeId).Max();

Console.WriteLine(query10);

Console.WriteLine("====================");

Console.WriteLine("k. Display total numbere of Employee joined after 1/1/2015 ");

Console.WriteLine("...");

Console.WriteLine("====================");

Console.WriteLine("l. Display Total Number Of Employee whose designation not Associate");

int q12 = (from q in list where q.Title!= "Associate" select q).Count();

Console.WriteLine(q12);

//Syntax Maethod

int ql = list.Where(l => l.Title != "Associate").Count();

Console.WriteLine(ql);

Console.WriteLine("====================");

Console.WriteLine("m. Display total number of Employee Based on city.");

var result1 = from e in list group e by e.City;

foreach (var v in result1)

{

Console.WriteLine("{0}-{1}",v.Key,v.Count());

}

Console.WriteLine("====================");

Console.WriteLine("n. display total number of employee based on city and Tittle");

var q14 = from c in list group c by new { c.City, c.Title } into t orderby t.Key.City

select new { City = t.Key.City, Title = t.Key.Title, TotalCount = t.Count() };

foreach (var s in q14)

{

if (s.TotalCount > 1)

{

Console.WriteLine("Total Number of Employee based On City & Title : {0}-{1}-{2}",s.City,s.Title, s.TotalCount);

}

}

Console.ReadLine();

}

}

}