//3rd feb

//assessment-LINQ

using System;

using System.Collections;

using System.Collections.Generic;

using System.IO;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Linq1

{

public class Employee

{

public string Name { get; set; }

public int Id { get; set; }

public string Manager { get; set; }

public string Dept { get; set; }

public int Salary { get; set; }

public List<Employee> GetDetails()

{

List<Employee> list = new List<Employee>();

list.Add(new Employee { Name = "pushpavathi", Id = 896814, Manager = "Karthik", Dept = "Admin", Salary = 25699 });

list.Add(new Employee { Name = "Supraja", Id = 896815, Manager = "Harish", Dept = "HR", Salary = 66699 });

list.Add(new Employee { Name = "Reddamma", Id = 896816, Manager = "Karthik", Dept = "Admin", Salary = 27699 });

list.Add(new Employee { Name = "kumar", Id = 896817, Manager = "Deepak", Dept = "HRM", Salary = 27699 });

list.Add(new Employee { Name = "Mounika", Id = 896818, Manager = "Karthik", Dept = "HR", Salary = 47699 });

list.Add(new Employee { Name = "Neelaveni", Id = 896823, Manager = "Harish", Dept = "Admin", Salary = 27699 });

list.Add(new Employee { Name = "Anamika", Id = 896819, Manager = "Deepak", Dept = "HRM", Salary = 47699 });

list.Add(new Employee { Name = "Navaneetha", Id = 896820, Manager = "Deepak", Dept = "Managment", Salary = 27699 });

list.Add(new Employee { Name = "Teja", Id = 896822, Manager = "Karthik", Dept = "HRM", Salary = 27699 });

list.Add(new Employee { Name = "kumar", Id = 896821, Manager = "Harish", Dept = "Managment", Salary = 29699 });

return list;

}

}

class Program

{

static void Main(string[] args)

{

Employee e = new Employee();

var emplist = e.GetDetails();

var employee2 = from x in emplist

select x;

foreach (var x in employee2)

Console.WriteLine(" EmpName {0} Emp Id {1} manager {2} Dept {3} salary {4}", x.Name, x.Id, x.Manager ,x.Dept,x.Salary);

int whichEmpSalary = 1;

var employees = (from emp in emplist

group emp by emp.Salary into g

orderby g.Key descending

select new

{

EmpRecord = g.ToList()

}).ToList();

employees[whichEmpSalary - 1].EmpRecord

.ForEach(i => Console.WriteLine(" EmpId {0} Emp Name {1} earns {2}", i.Id, i.Name, i.Salary));

var employee1s = (from emp in emplist

group emp by emp.Salary into g

orderby g.Key ascending

select new

{

EmpRecord = g.ToList()

}).ToList();

employee1s[whichEmpSalary - 1].EmpRecord

.ForEach(i => Console.WriteLine(" EmpId {0} Emp Name {1} earns {2}", i.Id, i.Name, i.Salary));

var Sumof = e.GetDetails()

.Sum(emp => emp.Salary);

var TotalSalary = (from emp in e.GetDetails()

select emp).Sum(e => e.Salary);

Console.WriteLine("Sum Of Salary = " + Sumof);

var Averageof = e.GetDetails()

.Average(emp => emp.Salary);

var AverageSalary = (from emp in e.GetDetails()

select emp).Average(e => e.Salary);

Console.WriteLine("Average Salary = " + Averageof);

var employee3 = from x in emplist

where x.Name=="kumar"

select x;

foreach (var x in employee3)

Console.WriteLine("the person kumar dept is "+x.Dept);

var employee4 = from x in emplist

where x.Dept == "HR"

select x;

foreach (var x in employee4)

Console.WriteLine("hhr dept related to "+x.Name);

var count = (from x in e.GetDetails()

select x.Dept).Count();

Console.WriteLine("Total No of Employees = " +count);

var dis = ( from x in e.GetDetails()

select x.Dept).Count();

var employee5 = from x in emplist

select x;

foreach (var x in employee5)

Console.WriteLine(" EmpName {0} Emp Id {1} Dept {2} ", x.Name, x.Id, x.Dept);

}

}

}