.NET ASSIGNMENT-05

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1. Declare a dictionary-based collection of Employee class objects

Accept details for Employees in a loop. Stop accepting based on user input (yes/no)'

Display the Employee with highest Salary

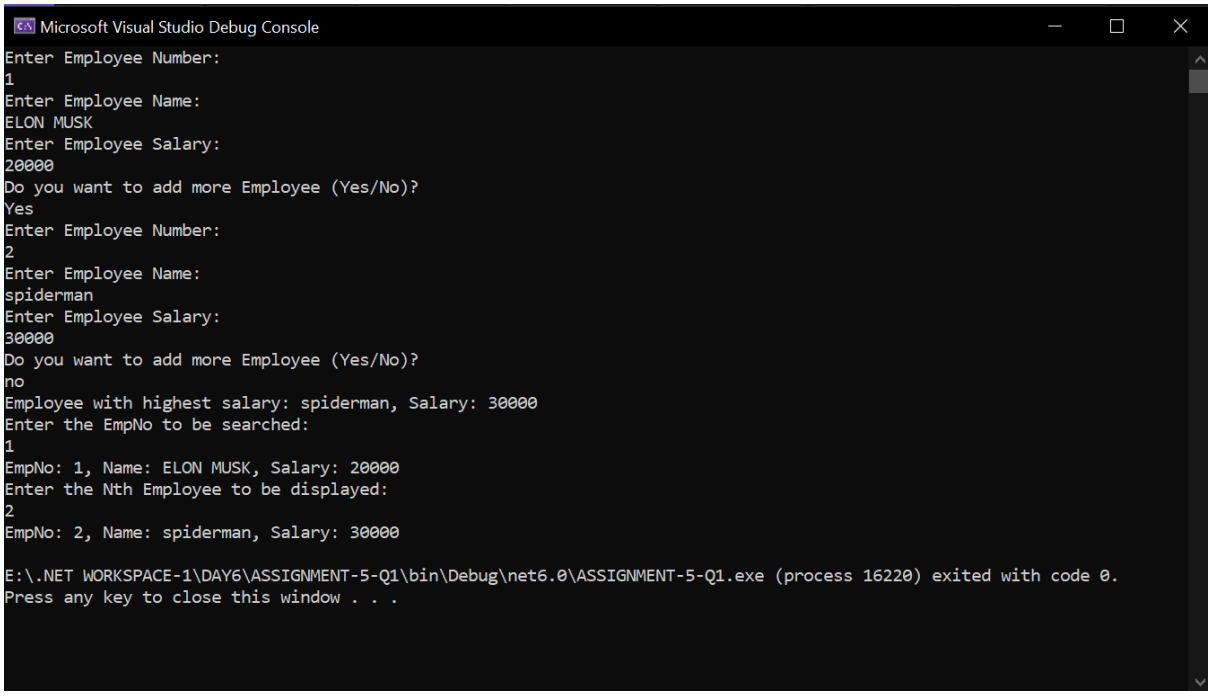
Accept EmpNo to be searched. Display all details for that employee.

Display details for the Nth Employee where N is a number accepted from the user.

SOLUTION-

```
using System;
using System.Collections.Generic;

class Employee
{
    public int EmpNo { get; set; }
    public string Name { get; set; }
    public int Salary { get; set; }
    public Employee(int empNo, string name, int salary)
    {
        EmpNo = empNo;
        Name = name;
        Salary = salary;
    }
}

class Program
{
    static void Main(string[] args)
    {
        // Declare a dictionary-based collection of Employee objects
        Dictionary<int, Employee> employees = new Dictionary<int, Employee>();

        // Accept employee details in a loop
        string input = "";
        while (input.ToLower() != "no")
        {
            Console.WriteLine("Enter Employee Number:");
            int empNo = int.Parse(Console.ReadLine());
            Console.WriteLine("Enter Employee Name:");
            string name = Console.ReadLine();
            Console.WriteLine("Enter Employee Salary:");
            int salary = int.Parse(Console.ReadLine());

            employees.Add(empNo, new Employee(empNo, name, salary));

            Console.WriteLine("Do you want to add more Employee (Yes/No)?");
            input = Console.ReadLine();
        }
```

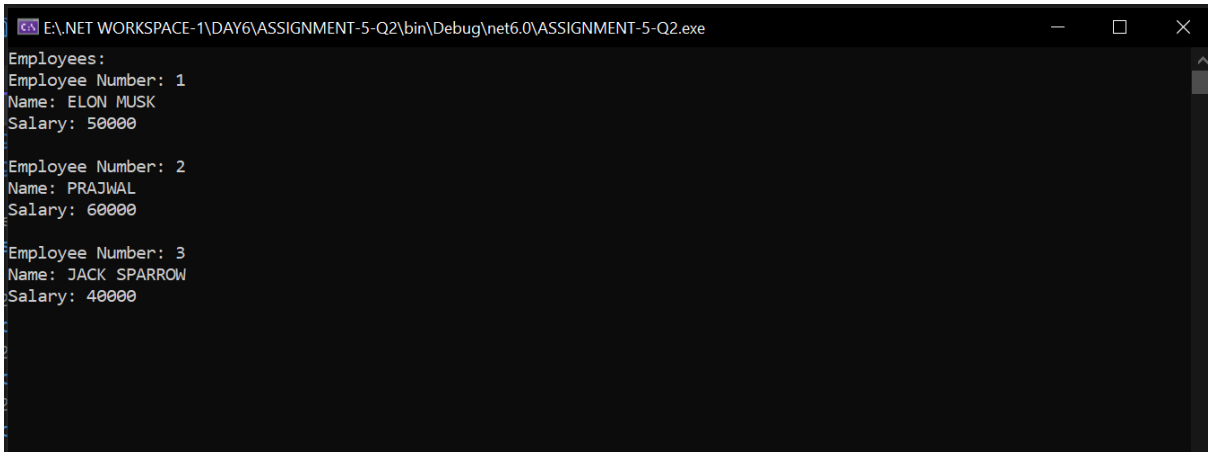
```
        // Display the Employee with highest Salary
        Employee highestSalaryEmp = employees.Values.OrderByDescending(emp =>
emp.Salary).First();
        Console.WriteLine("Employee with highest salary: {0}, Salary: {1}",
highestSalaryEmp.Name, highestSalaryEmp.Salary);

        // Accept EmpNo to be searched
        Console.WriteLine("Enter the EmpNo to be searched:");
        int searchEmpNo = int.Parse(Console.ReadLine());

        // Display all details for that employee
        Employee searchedEmp = employees[searchEmpNo];
        Console.WriteLine("EmpNo: {0}, Name: {1}, Salary: {2}",
searchedEmp.EmpNo, searchedEmp.Name, searchedEmp.Salary);

        // Display details for the Nth Employee
        Console.WriteLine("Enter the Nth Employee to be displayed:");
        int nthEmp = int.Parse(Console.ReadLine());
        Employee nthEmployee = employees.Values.ElementAt(nthEmp - 1);
        Console.WriteLine("EmpNo: {0}, Name: {1}, Salary: {2}",
nthEmployee.EmpNo, nthEmployee.Name, nthEmployee.Salary);
    }
}
```



2. Create an array of Employee objects. Convert it to a List<Employee>. Display all the Employees in the list.

```
using System;
using System.Collections.Generic;

class Employee
{
    public int EmpNo { get; set; }
    public string Name { get; set; }
```

```
    public decimal Salary { get; set; }

    public Employee(int empNo, string name, decimal salary)
    {
        EmpNo = empNo;
        Name = name;
        Salary = salary;
    }
}

class Program
{
    static void Main(string[] args)
    {
        Employee[] employees = new Employee[]
        {
             new Employee(1, "ELON MUSK ", 50000),
             new Employee(2, "PRAJWAL ", 60000),
             new Employee(3, "JACK SPARROW", 40000)
        };

        List<Employee> employeeList = new List<Employee>();
        employeeList.AddRange(employees);

        Console.WriteLine("Employees:");
        foreach (Employee employee in employeeList)
        {
            Console.WriteLine("Employee Number: " + employee.EmpNo);
            Console.WriteLine("Name: " + employee.Name);
            Console.WriteLine("Salary: " + employee.Salary);
            Console.WriteLine();
        }

        Console.ReadLine();
    }
}
```



3. Create a List<Employee>. Convert it to an array. Display all the array elements.

SOLUTION-

```
using System;
using System.Collections.Generic;

class Employee
```

```
{
    public string Name { get; set; }
    public int Age { get; set; }
    public Employee(string name, int age)
    {
        Name = name;
        Age = age;
    }
}

class Program
{
    static void Main(string[] args)
    {
        // Create a List of Employees
        List<Employee> employees = new List<Employee>
        {
            new Employee("ELON MUSK", 40),
            new Employee("PRAJWAL", 24),
            new Employee("JACK SPARROW", 50)
        };

        // Convert the List to an array
        Employee[] employeeArray = employees.ToArray();

        // Display all the elements of the array
        foreach (Employee employee in employeeArray)
        {
            Console.WriteLine(employee.Name + ", " + employee.Age);
        }
    }
}
```