DAY 2

NAME: Nandhini V
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Code:

IEmployeeRepo.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Day2EmployeeRepo.EmpRepo
{
    internal interface IEmployeeRepo<T> where T : Employee
    {
        List<T> GetAllEmployee();
        void AddEmp(T product);
    }
}
```

EmployeeRepo.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Day2EmployeeRepo.EmpRepo
{
    internal class EmployeeRepo<T> : IEmployeeRepo<T> where T : Employee
    {
        List<T> listOfEmployees = new List<T>();

        public void AddEmp(T emp)
        {
            listOfEmployees.Add(emp);
        }
```

```
        public List<T> GetAllEmployee()
        {
            return listOfEmployees;
        }
    }
}
```

Employee.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Day2EmployeeRepo
{
    abstract class Employee
    {
        public int Id { get; set; }
        public string Name { get; set; }
        public string Desig { get; set; }
        public Employee()
        {
            Console.WriteLine("Constructor is called: ");
        }

        public Employee(int id, string name, string Desig)
        {
            Id = id;
            Name = name;
            Desig = Desig;
        }

        public abstract string GetEmpDetails();

        ~Employee()
        {
            Console.WriteLine("Destroyed: " + Name);
        }
    }
}
```

EmployeeList.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Day2EmployeeRepo
{
    abstract class Employee
    {
        public int Id { get; set; }
        public string Name { get; set; }
        public string Desig { get; set; }
        public Employee()
        {
            Console.WriteLine("Constructor is called: ");
        }

        public Employee(int id, string name, string Desig)
        {
            Id = id;
            Name = name;
            Desig = Desig;
        }

        public abstract string GetEmpDetails();

        ~Employee()
        {
            Console.WriteLine("Destroyed: " + Name);
        }
    }
}
```

Program.cs

```
using Day2EmployeeRepo.EmpRepo;

namespace Day2EmployeeRepo
{
    class Program
    {
        static void Main(string[] args)
        {
            EmployeeList e1 = new EmployeeList(101, "Ramesh", "Developer", 25_000);
            EmployeeList e2 = new EmployeeList(102, "Priya", "UI/UX", 30_000);
```

```
        EmployeeList e3 = new EmployeeList(103, "Janu", "Developer", 33_000);
        EmployeeList e4 = new EmployeeList(104, "Karthika", "Manager", 80_000);
        EmployeeList e5 = new EmployeeList(105, "Jim", "TL", 40_000);
        EmployeeList e6 = new EmployeeList(106, "Ashwin", "Tester", 20_000);

        IEmployeeRepo<EmployeeList> emprepo = new EmployeeRepo<EmployeeList>();
        emprepo.AddEmp(e1);
        emprepo.AddEmp(e2);
        emprepo.AddEmp(e3);
        emprepo.AddEmp(e4);
        emprepo.AddEmp(e5);
        emprepo.AddEmp(e6);

        Console.WriteLine("***Employee Details***");
        foreach(Employee emp in emprepo.GetAllEmployee())
        {
           Console.WriteLine(emp.GetEmpDetails());
        }
     }
  }
}
```

Output:

```
***Employee Details***

-----------------
Id: 101, Name: Ramesh, Designation: , Salary: 25000

-----------------
Id: 102, Name: Priya, Designation: , Salary: 30000

-----------------
Id: 103, Name: Janu, Designation: , Salary: 33000

-----------------
Id: 104, Name: Karthika, Designation: , Salary: 80000

-----------------
Id: 105, Name: Jim, Designation: , Salary: 40000

-----------------
Id: 106, Name: Ashwin, Designation: , Salary: 20000
```