Day 10 Evening Assignment
By
Sudha Kumari Sugasani

Q1.Research and try to understand what is Abstraction?

Abstraction is an important part of Object Oriented Programming. It means showing required information to the user and hiding unnecessary information.
Abstraction can be implemented using abstract class in C#.
Abstract classes are base classes with partial information.

Q2.Write the two main uses of Abstract Classes by using example discussed in the class.

1.Code reusability,whichever methods are normal methods you'll get these methods in the derived class.
2.Enforcing the derived class to must overload the abstract methods.

Code:

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

namespace Day10Project6
{
    /*****************************************
     * Author:Sudha Kumari Sugasani
     * Purpose:Example for Abstract classs
     * ***************************************/
    abstract class Salary
    {
        /// <summary>
        /// It will return PF value
        /// </summary>
        /// <param name="basic"></param>
        /// <returns>PF</returns>
        public int GetPF(int basic)
        {
            return 12 * basic / 100;
        }
        /// <summary>
        /// It will return HRA
        /// </summary>
        /// <param name="basic"></param>
        /// <returns>HRA</returns>
        public int GetHRA(int basic)
        {
            return 40 * basic / 100;
        }
        public abstract int GetCA();
        public abstract int GetSA();
    }
    class Microsoft : Salary
    {
        /// <summary>
        /// It will return CA of Microsoft
        /// </summary>
        /// <returns>CA</returns>

        public override int GetCA()
```

```
        {
            return 6000;
        }
        /// <summary>
        /// It will return SA of Microsoft
        /// </summary>
        /// <returns>SA</returns>
        public override int GetSA()
        {
            return 7000;
        }
    }
    class Google:Salary
    {

        /// <summary>
        /// It will return CA of Google
        /// </summary>
        /// <returns>CA</returns>
        public override int GetCA()
        {
            return 10000;
        }

       /// <summary>
       /// It will return SA of Google
       /// </summary>
       /// <returns>SA</returns>
        public override int GetSA()
        {
            return 10000;
        }
    }
    class IBM : Salary
    {

        /// <summary>
        /// It will return CA of IBM
        /// </summary>
        /// <returns>CA</returns>
        public override int GetCA()
        {
            return 4000;
        }


        /// <summary>
        /// It will return SA of IBM
        /// </summary>
        /// <returns>SA</returns>
        public override int GetSA()
        {
            return 6000;
        }
    }
    class Facebook : Salary
    {
        /// <summary>
        /// It will return CA of Facebook
        /// </summary>
        /// <returns>CA</returns>
        public override int GetCA()
        {
```

```
            return 20000;
        }

        /// <summary>
        /// It will return SA of Facebook
        /// </summary>
        /// <returns>SA</returns>
        public override int GetSA()
        {
            return 5000;
        }
    }
    internal class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("Completed Processing");
            Console.ReadLine();
        }
    }
}
```

Q3.Create one more example of your choice to demonstrate Abstract Class

Code:

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

namespace Day10project7
{
        /*****************************************
         * Author:Sudha Kumari Sugasani
         * Purpose:Example2 for Abstract classs
         * ***************************************/
        abstract class NBHealthTech
        {
            /// <summary>
            /// It will return Company name
            /// </summary>
            /// <param name="basic"></param>
            /// <returns>NB HealthCare Technologies</returns>
            public String Companyname(int basic)
            {
                return "NB HealthCare Technologies";
            }
            /// <summary>
            /// It will return CompanyLocation
            /// </summary>
            /// <param name="basic"></param>
            /// <returns>Madhapur</returns>
            public String CompanyLocation()
            {
                return "Madhapur";
            }
            public abstract String GetName();
            public abstract int GetSalary();
            public abstract int GetId();
        }
        class Development : NBHealthTech
        {
```

```
            /// <summary>
            /// It will return Name in Development Team
            /// </summary>
            /// <returns>String</returns>

            public override String GetName()
            {
                return "Mounika";
            }
            /// <summary>
            /// It will return Salary of Developer
            /// </summary>
            /// <returns>int</returns>
            public override int GetSalary()
            {
                return 25000;
            }
           /// <summary>
           /// It will return Id of Developer
           /// </summary>
           /// <returns>int</returns>
            public override int GetId()
            {
            return 5;
            }
    }

    class Testing : NBHealthTech
    {
        /// <summary>
        /// It will return Name in Testing Team
        /// </summary>
        /// <returns>String</returns>

        public override String GetName()
        {
            return "Jeevitha";
        }
        /// <summary>
        /// It will return Salary of Tester
        /// </summary>
        /// <returns>int</returns>
        public override int GetSalary()
        {
            return 20000;
        }
        /// <summary>
        /// It will return Id of Tester
        /// </summary>
        /// <returns>int</returns>
        public override int GetId()
        {
            return 20;
        }
    }
    class UI: NBHealthTech
    {
        /// <summary>
        /// It will return Name in UI Team
        /// </summary>
        /// <returns>String</returns>

        public override String GetName()
```

```
        {
            return "Divya";
        }
        /// <summary>
        /// It will return Salary of UI
        /// </summary>
        /// <returns>int</returns>
        public override int GetSalary()
        {
            return 22000;
        }
        /// <summary>
        /// It will return Id of UI
        /// </summary>
        /// <returns>int</returns>
        public override int GetId()
        {
            return 23;
        }
    }

        internal class Program
        {
            static void Main(string[] args)
            {
                Console.WriteLine("Details entered successfully");
                Console.ReadLine();
            }
        }
    }
```