Day 10 Morning Assignments

By

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NB Health Care

1. Research and try to understand what is Abstraction

Abstraction :
Abstraction is one of the most important methods in OOPS Concept
The information which is required is only visible to the user and the rest is hidden is called Abstraction
Abstraction is implemented using Abstract classes that includes Abstract Methods

2. Write the 2 main uses of Abstract class

Uses of Abstract Class:

1. Code Reusability
2. Enforcing the derived class to must override the Abstract Methods

3. Create Sample code to Demonstrate Abstract Class

Code:

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

namespace Day_10_Project_1
{
    // Author : Praveen Chakravarthi
    // Purpose : Sample Code for Abstraction


    abstract class Salary
    {
        public int GetPF(int basic)
        {
            return 12 * basic / 100;
        }

        public int GetHRA(int basic)
        {
            return 40 * basic / 100;
        }

        public abstract int GetCA();
        public abstract int GetSA();
```

```
}
class Amazon : Salary
{
    public override int GetCA()
    {
        return 6000;
    }

    public override int GetSA()
    {
        return 7000;
    }
}

class Tata : Salary
    {
        public override int GetCA()
        {
            return 3000;
        }

        public override int GetSA()
        {
            return 6000;
        }
    }

        class Facebook : Salary
        {
            public override int GetCA()
            {
                return 7000;
            }

            public override int GetSA()
            {
                return 9000;
            }
        }
            class Microsoft : Salary
            {
                public override int GetCA()
                {
                    return 2000;
                }

                public override int GetSA()
                {
                    return 6000;
                }
            }
internal class Program
{
    static void Main(string[] args)
```

```
        {
            // object for Amazon

            // object for Tata

            // object for Facebook

            // object for Microsoft

            Console.WriteLine("Completed Processing");
            Console.ReadLine();
        }
    }
}
```

Output:

4. 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 Day_10_Project_2
{
    // Author : Praveen Chakravarthi
    // Purpose : Another Sample Code for Abstraction


    abstract class Company
    {
        public string GetName()
        {
            return ("NB HealthCare");
        }
        public string GetLoc()
        {
            return ("Hitech city");
        }

        public abstract int GetId();
        public abstract int GetSalary();
```

```
}
class Developer : Company
{
    public override int GetId()
    {
        return 101;
    }

    public override int GetSalary()
    {
        return 70000;
    }
}

class Analyst : Company
{
    public override int GetId()
    {
        return 201;
    }

    public override int GetSalary()
    {
        return 50000;
    }
}

class Tester : Company
{
    public override int GetId()
    {
        return 301;
    }

    public override int GetSalary()
    {
        return 40000;
    }
}
class Designer : Company
{
    public override int GetId()
    {
        return 401;
    }

    public override int GetSalary()
    {
        return 55000;
    }
}
internal class Program
{
    static void Main(string[] args)
```

```
    {
        // Object for Developer

        // Object for Analyst

        // Object for Tester

        // Object for Designer

        Console.WriteLine("Processing Completed");

        Console.ReadLine();
    }
  }
}
```

Output: