**OOP Lab #8**

**Static Class and Methods in C#**

**Static Class:**

Classes that cannot be instantiated or inherited are known as classes and the static keyword is used before the class named that contains of static data members and static methods. It is not possible to create an instance of a static class using the new keyword. The main features of static classes are as follows:

They only contain static members.

They cannot be instantiated or inherited and cannot contain instance constructors. However, the developer can create static constructor to initialize the static members.

**Static Method:**

You can define one or more static methods in anon-static class. Static methods can be called without creating an object of the non-static class. The static methods can only call other static methods and access non-static members of the class in the static methods.

**Code Syntax:**

namespace Static\_Class\_and\_Methods//Zohaib Amjad

{//Static class we use this class when we want to make data constant or fix.

static class Product

{

public static string ProductName;

public static int ProductId;

public static int ProductPrice;

static Product()//Static Constructor

{

ProductName = "Laptop";

ProductId = 234243;

ProductPrice = 55000;

}

public static void getProductDetails()//Static Method

{

Console.WriteLine("Product Name = {0}",ProductName);

Console.WriteLine("Product Id = {0}", ProductId);

Console.WriteLine("Product Price = {0}", ProductName);

}

public static void getDiscount()//static method for Discount

{

int d\_amount = ProductPrice / 10;

Console.WriteLine("Your Discount Amount is: {0}",d\_amount);

Console.WriteLine("Total cost of Product is: {0}",ProductPrice-d\_amount);

}

}

class Program

{

static void Main(string[] args)

{// we just call them with a class name

Product.getProductDetails();

Product.getDiscount();

Console.ReadLine();

}

}

}

**Output**

