**Lab Exercise 01**

Syntax:

using System;

namespace ItemNamespace

{

public abstract class Item

{

protected string item\_name;

protected double item\_price;

protected int item\_quantity;

private double total\_price;

public Item(string name, double price, int quantity)

{

this.item\_name = name;

this.item\_price = price;

this.item\_quantity = quantity;

}

public virtual double getTotalPrice()

{

return total\_price = item\_price \* item\_quantity;

}

public virtual void setPayment(double amount)

{

//overided this method.

}

}

public class DiscountedItem : Item

{

private double item\_discount;

private double discounted\_price;

private double payment\_amount;

private double change;

public DiscountedItem(string name, double price, int quantity, double discount) : base (name, price, quantity)

{

this.item\_discount = (discount \* 0.01) \* price;

this.discounted\_price = price - this.item\_discount;

}

public override double getTotalPrice()

{

return discounted\_price \* item\_quantity;

}

public override void setPayment(double amount)

{

this.payment\_amount = amount;

}

public double getChange()

{

return this.change = this.payment\_amount - getTotalPrice();

}

}

public class MainClass

{

public static void Main(string[] args)

{

String name;

int discount, quantity;

double price;

Console.WriteLine("Purchase Discounted Item.\n");

Console.Write("Item : ");

name = Console.ReadLine();

Console.Write("Discount : ");

discount = Convert.ToInt32(Console.ReadLine());

Console.Write("Price : ");

price = Convert.ToDouble(Console.ReadLine());

Console.Write("Quantity : ");

quantity = Convert.ToInt32(Console.ReadLine());

DiscountedItem item = new DiscountedItem(name, price, quantity, discount);

item.setPayment(4000);

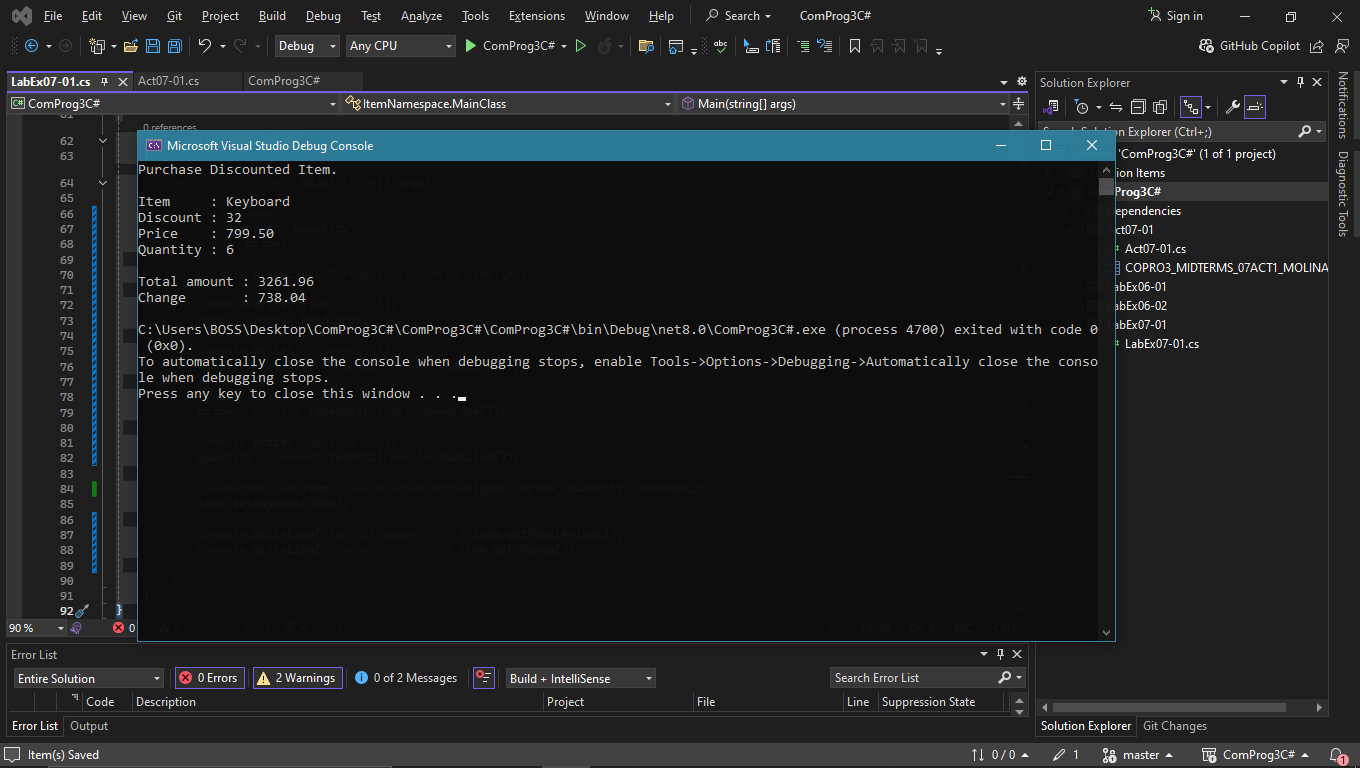
Console.WriteLine("\nTotal amount : " + item.getTotalPrice());

Console.WriteLine("Change : " + item.getChange());

}

}

}

Output: