

INTERNET TECHNOLOGY LAB

WEEK 2

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Question 1

```
using System;

namespace IT_LAB_WEEK_2 {

    public delegate void PriceChangedEventHandler(int newPrice);

    public class Item {

        private string name;
        private int price;

        public string Name {

            get {
                return name;
            }

            set {
                name = value;
            }
        }

        public event PriceChangedEventHandler PriceChanged;

        public int Price {

            get {
                return price;
            }

            set {
                price = value;

                PriceChanged?.Invoke(value);
            }
        }
    }
}
```

```

class Program {

    public static void priceChangeDetected(int newPrice) {
        Console.WriteLine("Price of the item changed to {0}", newPrice);
    }

    public static void quest1() {

        Item item = new Item();
        item.PriceChanged += priceChangeDetected;
        item.Price = 1299;

    }

    public static void Main(string[] args) {

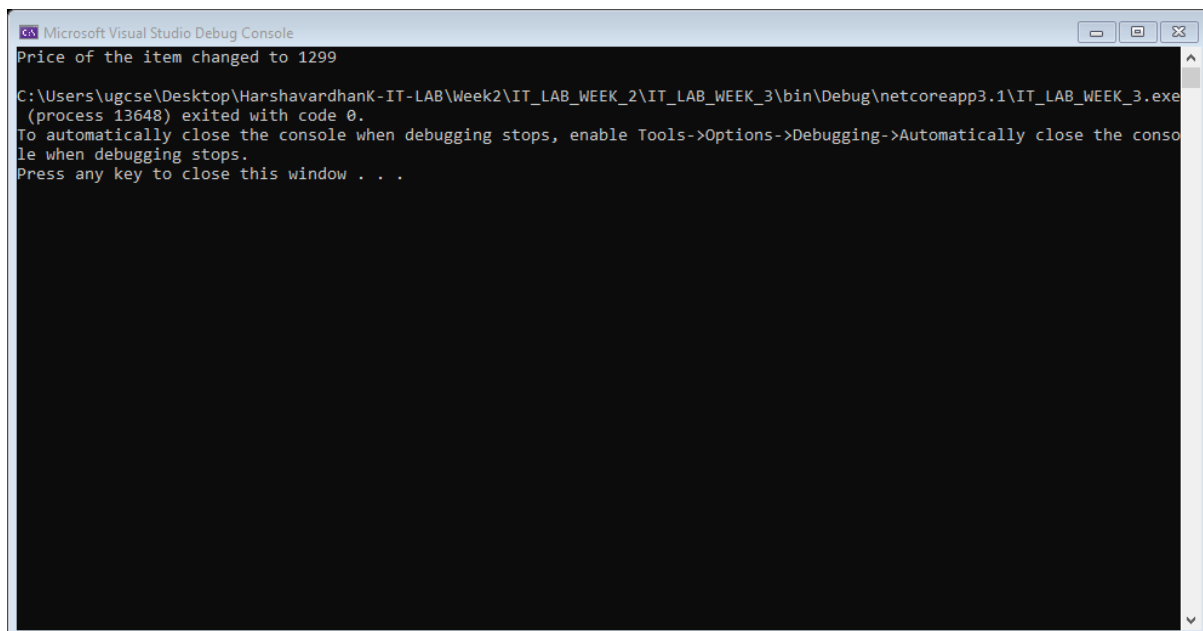
        Item item = new Item();
        item.PriceChanged += priceChangeDetected;
        item.Name = "iPhone 12 Pro";
        item.Price = 129000;

    }

}

```

Output



The screenshot shows the Microsoft Visual Studio Debug Console window. The title bar reads "Microsoft Visual Studio Debug Console". The console output is as follows:

```

Price of the item changed to 1299
C:\Users\ugcse\Desktop\HarshavardhanK-IT-LAB\Week2\IT_LAB_WEEK_2\IT_LAB_WEEK_3\bin\Debug\netcoreapp3.1\IT_LAB_WEEK_3.exe
(process 13648) exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console
when debugging stops.
Press any key to close this window . . .

```

Question 2

```
using System;

namespace IT_LAB_WEEK_2 {

    public class Item2 {

        public string Name { get; set; }
        public static int Cost;

        public Item2(string name, int cost) {
            Name = name;
            Cost = cost;
        }

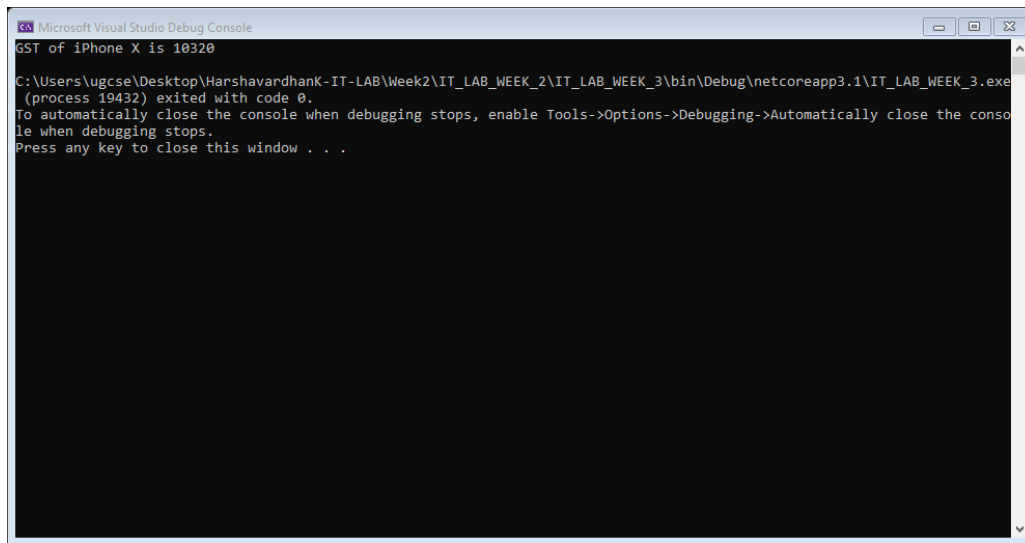
        public double CalcGst() {
            return 0.08 * Cost;
        }
    }

    class Program {

        public static void quest2() {
            Item2 item = new Item2("iPhone X", 129000);
            Console.WriteLine(item.CalcGst());
        }

        public static void Main(string[] args) {
            quest2();
        }
    }
}
```

Output



The screenshot shows the Microsoft Visual Studio Debug Console window. The title bar reads "Microsoft Visual Studio Debug Console". The console output is as follows:

```
gst of iPhone X is 10320
C:\Users\ugcse\Desktop\HarshavardhanK-IT-LAB\Week2\IT_LAB_WEEK_2\IT_LAB_WEEK_3\bin\Debug\netcoreapp3.1\IT_LAB_WEEK_3.exe
(process 19432) exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```

Question 3

```
using System;

namespace IT_LAB_WEEK_2 {

    public delegate void TrafficDelegate();

    public class TrafficSignal {

        public void yellowSignal() {
            Console.WriteLine("Get ready to move");
        }

        public void greenSignal() {
            Console.WriteLine("Move");
        }

        public void redSignal() {
            Console.WriteLine("Stop");
        }

    }

    class Program {

        public static void Main(string[] args) {

            TrafficDelegate trafDel;

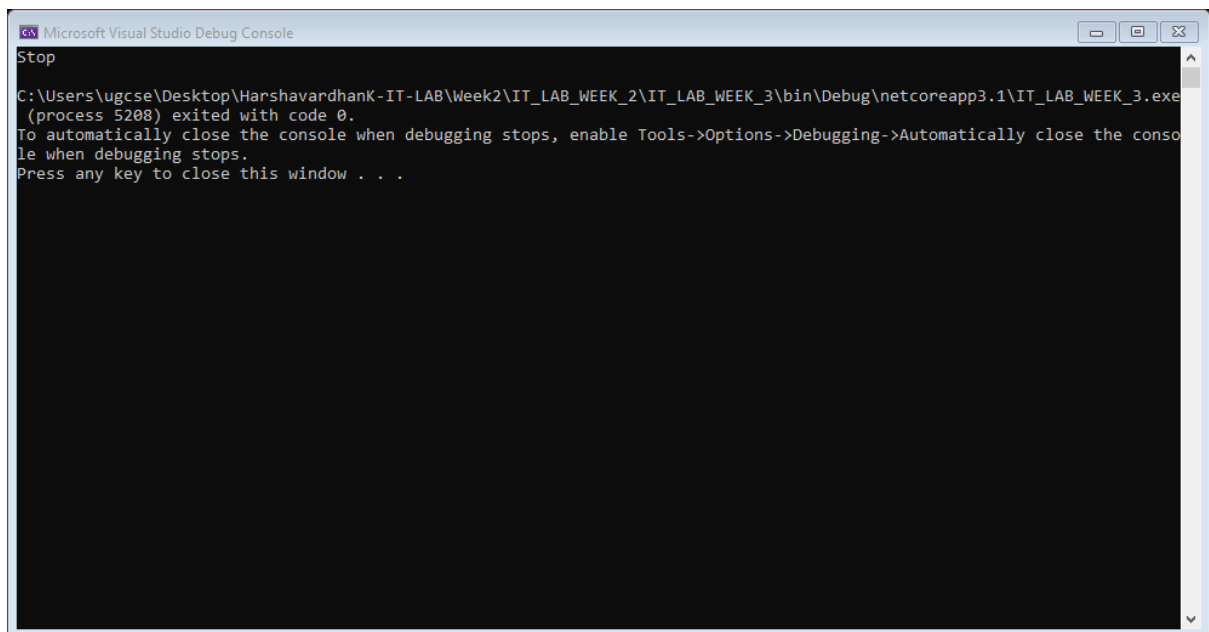
            TrafficSignal trafSignal = new TrafficSignal();
            trafDel = trafSignal.redSignal;
            trafDel();

        }

    }

}
```

Output



The image shows a screenshot of the Microsoft Visual Studio Debug Console window. The window has a title bar that reads "Microsoft Visual Studio Debug Console". The main area of the console is black with white text. The text displayed is as follows:

```
Stop
C:\Users\ugcse\Desktop\Harshavardhank-IT-LAB\Week2\IT_LAB_WEEK_2\IT_LAB_WEEK_3\bin\Debug\netcoreapp3.1\IT_LAB_WEEK_3.exe
(process 5208) exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console
when debugging stops.
Press any key to close this window . . .
```