**Answer 1:**

**Code:**

using System;

namespace q1

{

public delegate void PriceChangeHandler(double val);

class Item

{

private string name;

private double price;

public event PriceChangeHandler PriceChanged;

public double Price

{

get { return price; }

set

{

if (PriceChanged != null)

PriceChanged.Invoke(value);

}

}

}

class Program

{

public static void Main(string[] args)

{

Item myItem = new Item();

int newPrice = 0;

Console.WriteLine("Without event handling: \nEnter new price:");

string s = Console.ReadLine();

int.TryParse(s, out newPrice);

myItem.Price = newPrice;

Console.WriteLine("-------------------------------");

myItem.PriceChanged += eventHandler;

Console.WriteLine("Event handling example: \nEnter new Price:");

s = Console.ReadLine();

int.TryParse(s, out newPrice);

myItem.Price = newPrice;

}

static void eventHandler(double val)

{

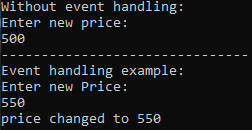
Console.WriteLine("price changed to " + val);

}

}

}

**IO:**



**Answer 2:**

**Code:**

using System;

namespace q2

{

class Item

{

public string Name { get; set; }

public static double Cost { get; set; }

public void calculateGST()

{

double gst = Item.Cost \* 0.08;

Console.WriteLine("GST = " + gst);

}

}

class Program

{

static void Main(string[] args)

{

Console.WriteLine("Enter cost: ");

double cost = 0.0;

double.TryParse(Console.ReadLine(), out cost);

if (cost >= 0)

{

Item myItem = new Item();

Item.Cost = cost;

myItem.calculateGST();

}

else

{

Console.WriteLine("Cost should be >= 0");

}

}

}

}

**IO:**

**If cost is negative:**



**If entered cost is positive:**



**Answer 3:**

**Code:**

using System;

namespace q3

{

delegate void TrafficDel();

class TrafficSignal

{

public void Yellow()

{

Console.Write("Start your engines or start slowing down.");

}

public void Green()

{

Console.Write("Time to accelerate!");

}

public void Red()

{

Console.Write("You have to wait for some time.!");

}

}

class Program

{

static void Main(string[] args)

{

TrafficDel signal;

TrafficSignal signleObject = new TrafficSignal();

signal = signleObject.Red;

Console.Write("Result of \"signal = signleObject.Red;\" is: ");

signal();

Console.WriteLine("");

signal = signleObject.Yellow;

Console.Write("Result of \"signal = signleObject.Yellow;\" is: ");

signal();

Console.WriteLine("");

signal = signleObject.Green;

Console.Write("Result of \"signal = signleObject.Green;\" is: ");

signal();

Console.WriteLine("");

}

}

}

**IO:**

