Q1.

using System;

using System.Collections.Generic;

using System.Text;

namespace ConsoleAppQ1

{

public delegate void PriceChangedEventHandler(double price);

class Item

{

public event PriceChangedEventHandler PriceChanged;

string nameItem;

double priceItem;

public string NameItem

{

get

{

return nameItem;

}

set

{

nameItem = value;

}

}

public double PriceItem

{

get

{

return priceItem;

}

set

{

priceItem = value;

if (PriceChanged != null)

{

PriceChanged(value);

}

}

}

}

}

using System;

namespace ConsoleAppQ1

{

class Program

{

public static void ChangeDetected(double price)

{

Console.WriteLine("The new price is: {0}", price);

Console.WriteLine("Price has been changed");

}

static void Main(string[] args)

{

Item saleProduct = new Item();

saleProduct.PriceChanged += ChangeDetected;

Console.WriteLine("Enter the new price:");

double price = Convert.ToInt32(Console.ReadLine());

saleProduct.PriceItem = price;

}

}

}

Q2.

using System;

using System.Collections.Generic;

using System.Text;

namespace ConsoleAppQ2

{

class Item

{

private string name;

private static decimal cost;

public string Name

{

get;

set;

}

public static decimal Cost

{

set

{

if (value > 0)

{

cost = value;

}

}

}

public decimal CalcGST()

{

return ((decimal)0.08 \* cost);

}

}

}

using System;

namespace ConsoleAppQ2

{

class Program

{

static void Main(string[] args)

{

Item item1 = new Item();

Console.WriteLine("Enter base cost: ");

decimal baseCost = Convert.ToDecimal(Console.ReadLine());

Item.Cost = baseCost;

decimal gst=item1.CalcGST();

Console.WriteLine("GST: {0}", gst);

}

}

}

Q3.

using System;

using System.Collections.Generic;

using System.Text;

namespace ConsoleAppQ3

{

class TrafficSignal

{

public delegate void TrafficDel();

public static void Yellow()

{

Console.WriteLine("Yellow: Be ready");

}

public static void Red()

{

Console.WriteLine("Red: Stop");

}

public static void Green()

{

Console.WriteLine("Green: Go");

}

static void Main(string[] args)

{

TrafficDel signal;

Console.WriteLine("Traffic:");

signal = Red;

signal();

signal = Yellow;

signal();

signal = Green;

signal();

}

}

}