INTERNET TECHNOLOGY LAB

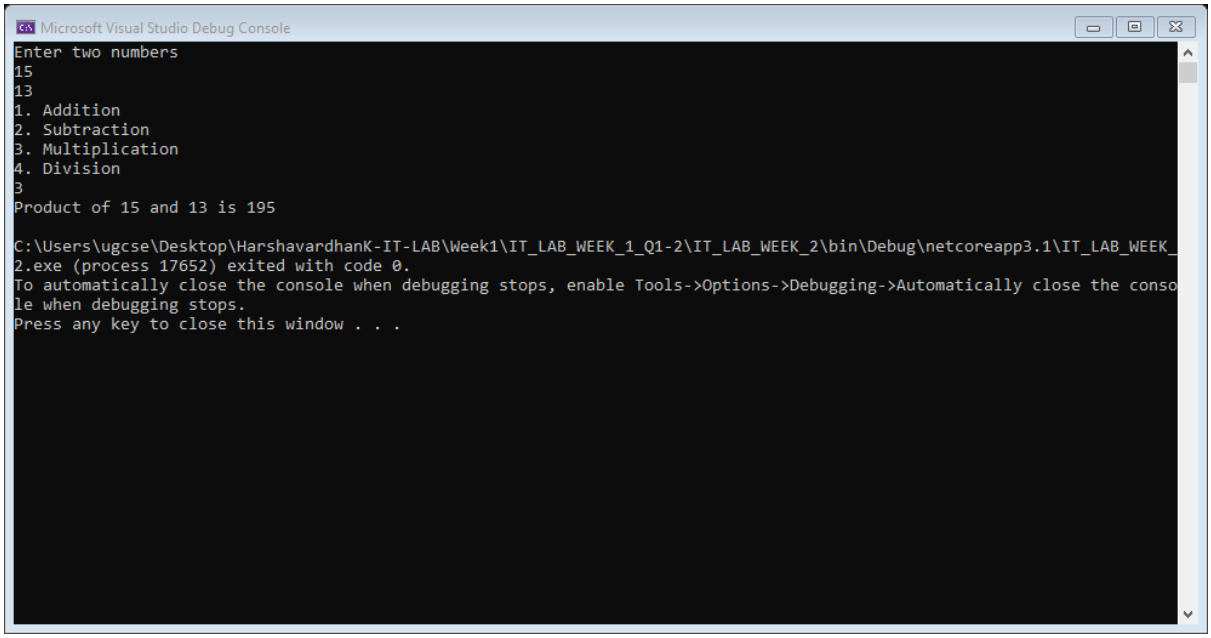
Week 1

Question 1

```
namespace IT_LAB_WEEK_1 {

    class Program {


        public static void arithmetic() {

            Console.WriteLine("Enter two numbers");

            int num1, num2;
            int.TryParse(Console.ReadLine(), out num1);
            int.TryParse(Console.ReadLine(), out num2);

            Console.WriteLine("1. Addition\n2. Subtraction\n3. Multiplication\n4.
Division");
            int choice;
            int.TryParse(Console.ReadLine(), out choice);

            switch(choice) {

                case 1:
                    Console.WriteLine("Sum of {0} and {1} is {2}", num1, num2, num1 +
num2); break;
                case 2:
                    Console.WriteLine("Difference of {0} and {1} is {2}", num1, num2,
num1 - num2); break;
                case 3:
                    Console.WriteLine("Product of {0} and {1} is {2}", num1, num2,
num1 * num2); break;
                case 4:
                    Console.WriteLine("Quotient of {0} and {1} is {2}", num1, num2,
num1 / num2); break;
                default:
                    Console.WriteLine("invalid option"); break;

            }
        }

    }
```

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

            arithmetic();

    }
 }

}
```

Output

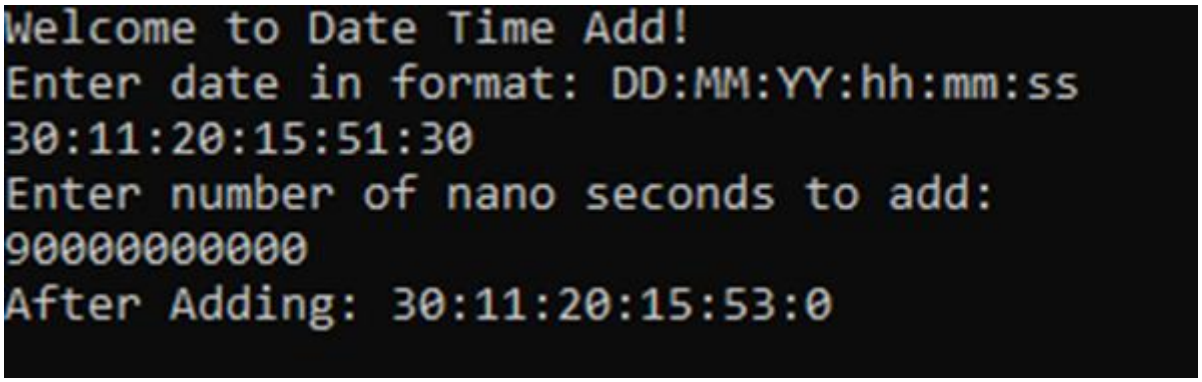


Question 2

```
using System;

namespace IT_LAB_WEEK_1 {

    class Program {

        static void Main(string[] args)
        {
            Console.WriteLine("Welcome to Date Time Add!");
            Console.WriteLine("Enter date in format: DD:MM:YY:hh:mm:ss");

            String inputDate;
            inputDate = Console.ReadLine();

            Console.WriteLine("Enter number of nano seconds to add:");
            Int64 ticks = Int64.Parse(Console.ReadLine());

            Console.WriteLine("After Adding: " + addTime(inputDate, ticks));
      }



        public static String addTime(String inputDate, Int64 ticks) {

            int DAY = 0;
            int YEAR = 2;
            int SECOND = 5;
            long NANO_TO_SECONDS = 1000000000;


            String[] subStrings = inputDate.Split(':');
            Int64 seconds = (ticks / NANO_TO_SECONDS);
            Int64 carry = seconds;

            String result = "";
            String dayTemp = "";
            Int64 add;


            String temp = subStrings[0];
            subStrings[0] = subStrings[2];
            subStrings[2] = temp;


            Int64[] mods = { 31, 12, 100, 24, 60, 60 };


            for (int i = SECOND; i >= DAY; i--)
            {
                add = (carry + Int64.Parse(subStrings[i])) % mods[i];
                carry = (carry + Int64.Parse(subStrings[i])) / mods[i];


                if (i > YEAR)
                    result = ":" + (add + result);
                else if (i != DAY)
                    dayTemp += ((add) + ":");
                else
```

```
                dayTemp += (add);
            }


            result = (dayTemp + result);

            return result;


        }

    }
}
```

Output

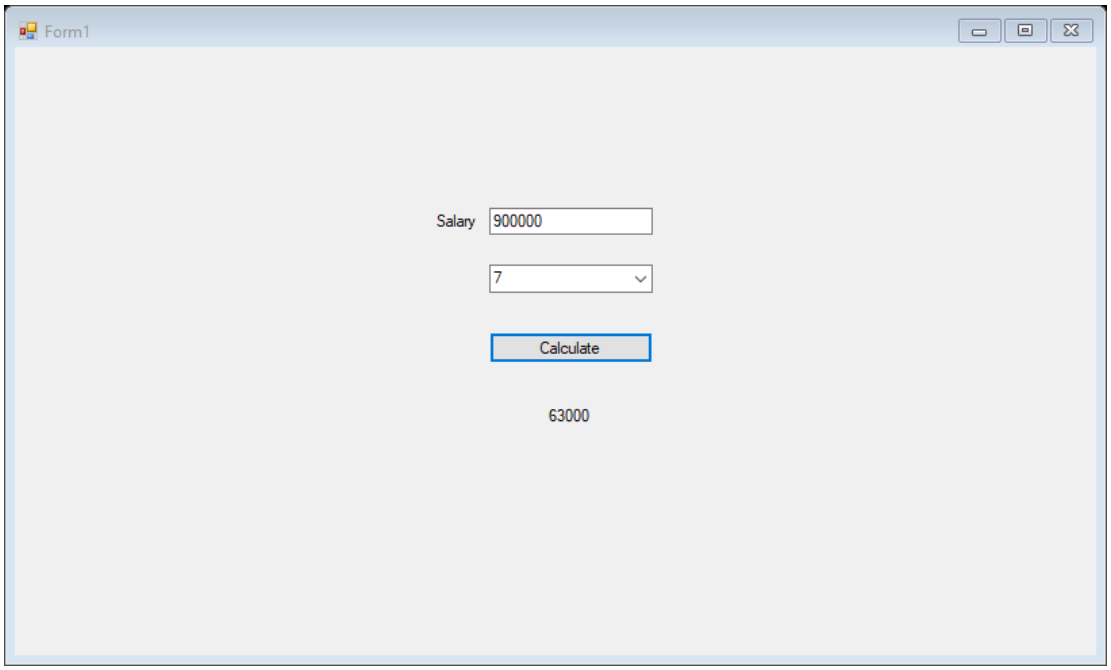


Question 3

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace IT_LAB_WEEK_1_WINFORMS
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
        }


        private void button1_Click(object sender, EventArgs args)
        {
            Int64 salary = Int64.Parse(salaryTextbox.Text);
            int position = comboBox1.SelectedIndex;

            double bonus;

            Console.WriteLine("hello");

            if (position == 0)
            {
                bonus = (0.1 * salary);
            }
            else if (position >= 1 && position < 4)
            {
                bonus = (0.09 * salary);
            }
            else if (position >= 4 && position < 7)
            {
                bonus = (0.07 * salary);
            }
            else
            {
                bonus = (0.05 * salary);
            }

            bonusLabel.Text = bonus.ToString("0.##");
            salaryLabel.Text = "hello";
        }

        private void button1_MouseClick(object sender, MouseEventArgs e)
        {
            Int64 salary = Int64.Parse(salaryTextbox.Text);
            int position = comboBox1.SelectedIndex;

            double bonus;

            Console.WriteLine("hello");
```

```
            if (position == 0)
            {
                bonus = (0.1 * salary);
            }
            else if (position >= 1 && position < 4)
            {
                bonus = (0.09 * salary);
            }
            else if (position >= 4 && position < 7)
            {
                bonus = (0.07 * salary);
            }
            else
            {
                bonus = (0.05 * salary);
            }

            bonusLabel.Text = bonus.ToString();
        }
    }
}
```

Output

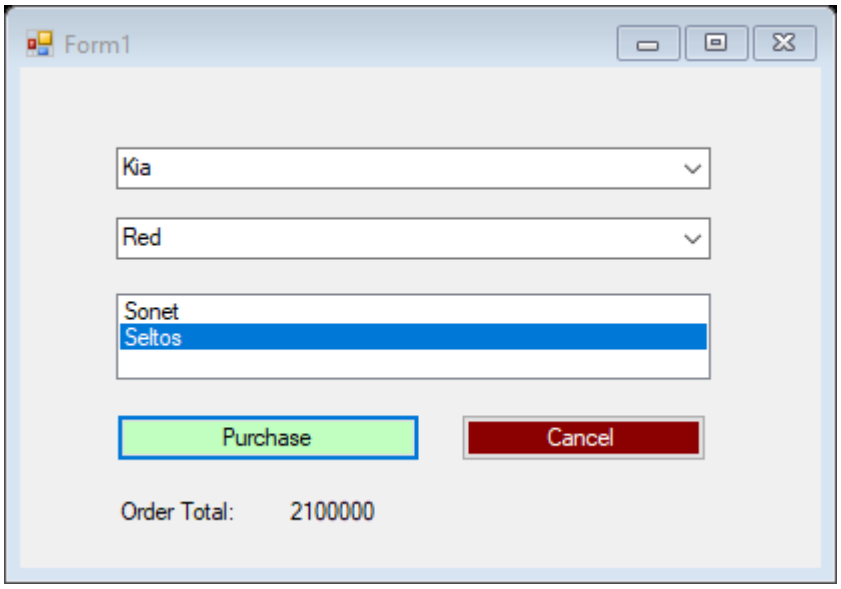


Question 4

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace Car_Purchase
{
    public partial class Form1 : Form
    {
        public static String[] toyota = {"Corolla", "Yaris", "Innova", "Fortuner"};
        public static String[] toyotaPrices = { "900000", "1700000", "2100000",
"3500000" };

        public static String[] marutiSuzuki = {"Baleno", "Swift", "Dezire"};
        public static String[] suzukiPrices = { "1200000", "1000000", "875000" };

        public static String[] hyundai = {"Grand i10", "i20 Asta", "i30"};
        public static String[] hyundaiPrices = { "870000", "1100000", "2000000" };

        public static String[] kia = {"Sonet", "Seltos"};
        public static String[] kiaPrices = { "1250000", "2100000"};

        public Form1()
        {
            InitializeComponent();
        }

        public void comboBox1_ItemSelected(Object observer, EventArgs e)
        {
           switch(comboBox1.SelectedIndex)
            {
                case 0:
                    listBox1.Items.Clear();
                    listBox1.Items.AddRange(marutiSuzuki);
                    break;

                case 1:
                    listBox1.Items.Clear();
                    listBox1.Items.AddRange(hyundai); break;

                case 2:
                    listBox1.Items.Clear();
                    listBox1.Items.AddRange(kia);break;

                case 3:
                    listBox1.Items.Clear();
                    listBox1.Items.AddRange(toyota); break;
            }
        }

        public void listBox1_ItemSelected(Object observer, EventArgs e)
```

```
        {
            String price;

            switch (comboBox1.SelectedIndex)
            {
                case 0:
                    price = suzukiPrices[listBox1.SelectedIndex];
                    break;

                case 1:
                    price = hyundaiPrices[listBox1.SelectedIndex];
                    break;

                case 2:
                    price = kiaPrices[listBox1.SelectedIndex];
                    break;

                case 3:
                    price = toyotaPrices[listBox1.SelectedIndex];
                    break;

                default:
                    price = "0";
                    break;
            }

            label2.Text = price;
        }

        public void button1_Click(Object observer, EventArgs e)
        {
            MessageBox.Show("Thank you for Purchasing " + comboBox1.Text + " " +
listBox1.SelectedItem);
        }

        public void button2_Click(Object observer, EventArgs e)
        {
            comboBox2.SelectedIndex = 0;
            comboBox1.SelectedIndex = 0;
            listBox1.SelectedIndex = 0;
            label2.Text = "Uncalculated";
            MessageBox.Show("Selections Reset");
     }

    }
```

Output


Form1
Kia
Red
Sonet
Seltos
Purchase
Cancel
Order Total:
2100000