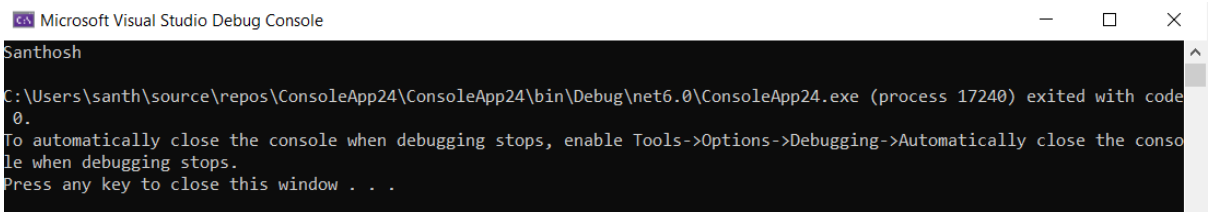
LAB SHEET 8
(Properties in C#, Events & Delegates)

1. Write a code to show the concept of C# Properties

```
class Person
{
    private string name; // field
    public string Name   // property
    {
        get { return name; }
        set { name = value; }
    }
}
class Program
{
    static void Main()
    {
        Person myObj = new Person();
        myObj.Name = "Santhosh";
        Console.WriteLine(myObj.Name);
    }
}
```



Assessment 8a:

Write a program to get and set the student's roll number, Name and Specialization using C# property.

2. Write a code to show the concept of delegate for encapsulating different methods

```
namespace delegateoperation
{
    delegate int Calculate(int n1, int n2);
    class Program
    {
        public static int Multiply(int i, int j)
        {
            return (i * j);
        }
        public static int add(int i, int j)
        {
            return (i + j);
        }
        static void Main()
        {
            int a = 90;
            int b = 78;
            Calculate obj1 = Program.add;
            Console.WriteLine("result is" + obj1(a, b));
            Calculate obj2 = new Calculate(Program.Multiply);
            Console.WriteLine("result of Multiplication  is" + obj2(a, b));
            Console.ReadKey();
        }

    }
}
```

```
result is168
result of Multiplication  is7020
```

Assessment 8b:

Write a C# Program to find out the area of the triangle and rectangle using delegates.

3. Write a code to handle the event in C#.

```
namespace SampleApp
{
    public delegate string MyDel(string str);
    class EventProgram
    {
        event MyDel MyEvent;
        public EventProgram()
        {
            this.MyEvent += new MyDel(this.WelcomeUser);
        }
        public string WelcomeUser(string username)
        {
            return "Welcome To " + username;
        }
        static void Main(string[] args)
        {
            EventProgram obj1 = new EventProgram();
            string result = obj1.MyEvent("C# Classes");
            Console.WriteLine(result);
        }
    }
}
```