

1.

class Program

```
{
    static void Main()
    {
        string file1 = "C:\\Users\\subramaniya.k\\Downloads\\file1.txt";
        string file2 = "C:\\Users\\subramaniya.k\\Downloads\\file2.txt";

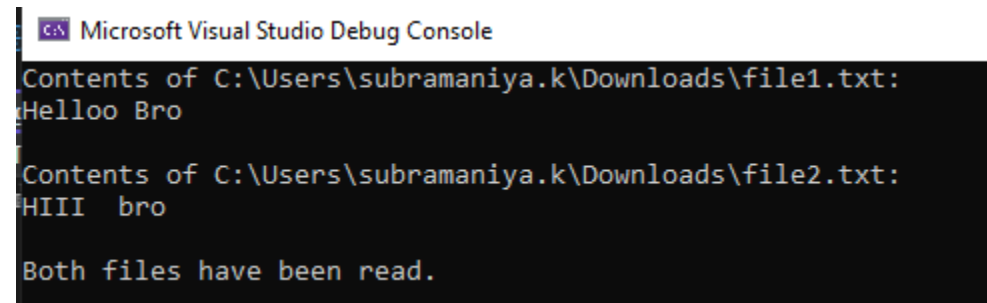
        Thread thread1 = new Thread(() => ReadFile(file1));
        Thread thread2 = new Thread(() => ReadFile(file2));

        thread1.Start();
        thread2.Start();

        thread1.Join();
        thread2.Join();

        Console.WriteLine("Both files have been read.");
    }

    static void ReadFile(string filename)
    {
        try
        {
            string content = File.ReadAllText(filename);
            Console.WriteLine($"Contents of {filename}: \n{content}\n");
        }
        catch (Exception ex)
        {
            Console.WriteLine($"Error reading {filename}: {ex.Message}");
        }
    }
}
```



C:\> Microsoft Visual Studio Debug Console

```
Contents of C:\Users\subramaniya.k\Downloads\file1.txt:
Helloo Bro

Contents of C:\Users\subramaniya.k\Downloads\file2.txt:
HIII bro

Both files have been read.
```

2.

class Program

```
{
    static async Task Main()
    {
        string file1 = "C:\\Users\\subramaniya.k\\Downloads\\file1.txt";
        string file2 = "C:\\Users\\subramaniya.k\\Downloads\\file2.txt";


        Task<string> readFile1Task = ReadFileAsync(file1);
        Task<string> readFile2Task = ReadFileAsync(file2);

        string[] results = await Task.WhenAll(readFile1Task, readFile2Task);

        Console.WriteLine($"Contents of {file1}:\\n{results[0]}\\n");
        Console.WriteLine($"Contents of {file2}:\\n{results[1]}\\n");

        Console.WriteLine("Both files have been read asynchronously.");
    }

    static async Task<string> ReadFileAsync(string filename)
    {
        try
        {
            using (StreamReader reader = new StreamReader(filename))
            {
                string content = await reader.ReadToEndAsync();
                return content;
            }
        }
        catch (Exception ex)
        {
            return $"Error reading {filename}: {ex.Message}";
        }
    }
}
```

 Microsoft Visual Studio Debug Console

```
Contents of C:\\Users\\subramaniya.k\\Downloads\\file1.txt:
Helloo Bro
```

```
Contents of C:\\Users\\subramaniya.k\\Downloads\\file2.txt:
HIII bro
```

```
Both files have been read asynchronously.
```

3.

Teacher.cs

```
namespace Delegate
{
    public class Teacher
    {
        public Student std;

        public Teacher()
        {
            std = new Student(Test_Completed);
        }
        public void Test_Completed(string sMsg)
        {
            Console.WriteLine("Student Test Status :"+sMsg);
        }
    }
}
```

Student.cs

```
namespace Delegate
{
    public class Student
    {
        public delegate void pass_info(string msg);
        public pass_info pass_info_dele;

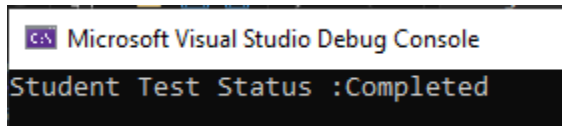
        public Student (pass_info pass_info_dele)
        {
            this.pass_info_dele = pass_info_dele;
        }

        public void WriteTest()
        {
            pass_info_dele("Completed");
        }
    }
}
```

Program.cs

```
namespace Delegate
{
    public class Program
    {
        static void Main(string[] args)
        {
            Teacher teacher = new Teacher();
            teacher.std.WriteTest();
        }
    }
}
```

Output



Microsoft Visual Studio Debug Console

Student Test Status :Completed