Q.1. Write a C# Sharp program to create a text file and read it.

Expected Output:

Here is the content of the file mytest.txt:

Hello and Welcome

It is the first content

Of the text file mytest.txt

Git Lab link:- https://github.com/AniketShinde9598/Dotnet_LabExam.git

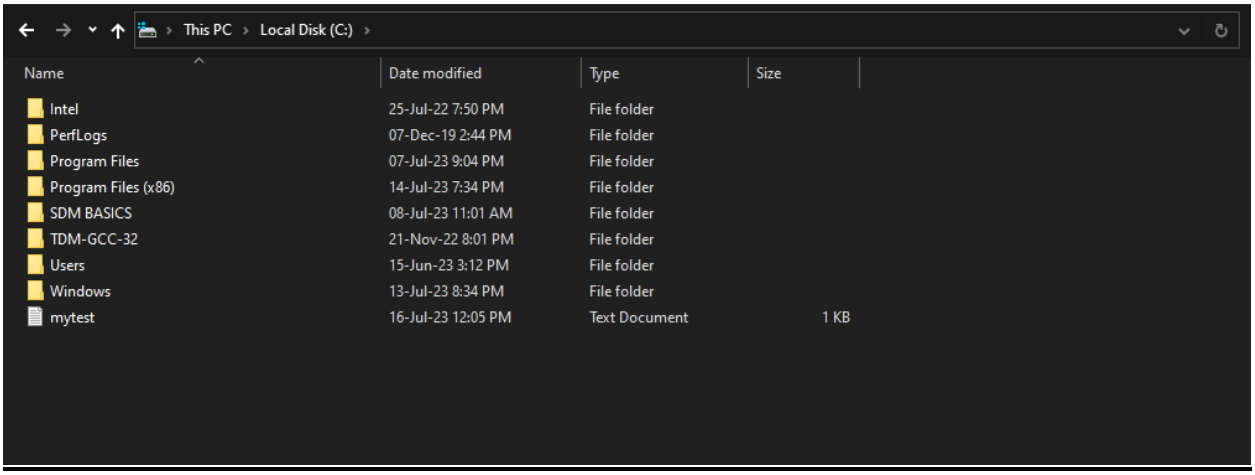
Code:-

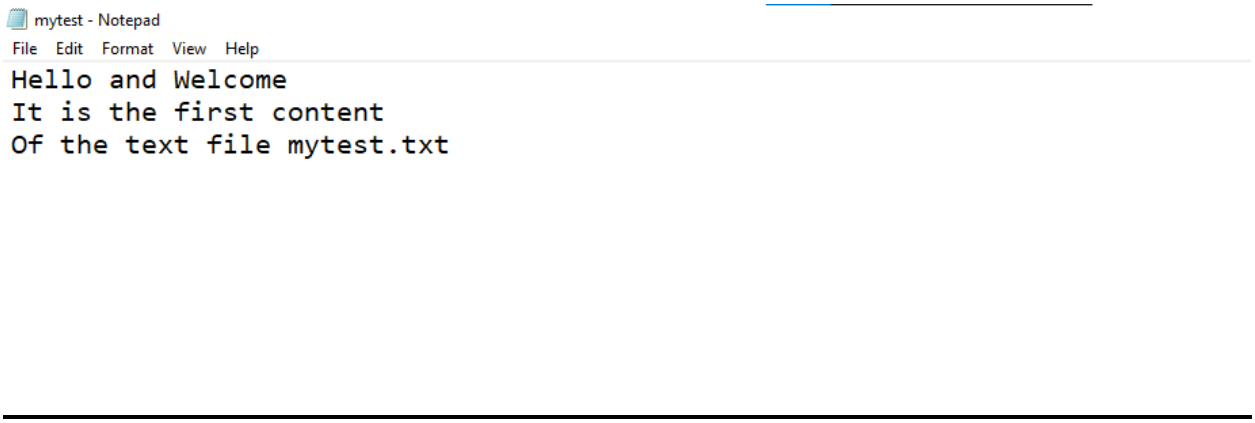
```
namespace TextFileHandling
{
    internal class Program
    {
        static void Main(string[] args)
        {
            WriteToTextFile();
            Console.WriteLine("Here is the content of the file mytest.txt:");
            ReadFromTextFile();
        }

        private static void WriteToTextFile()
        {
            // Path to the text file
            StreamWriter writer = File.CreateText("C:\\mytest.txt");
            writer.WriteLine("Hello and Welcome");
            writer.WriteLine("It is the first content");
            writer.WriteLine("Of the text file mytest.txt");
            writer.Close();
        }

        private static void ReadFromTextFile()
        {
            string? s;
            StreamReader reader = File.OpenText("C:\\mytest.txt");
            while ((s = reader.ReadLine()) != null)
            {
                Console.WriteLine(s);
            }
            reader.Close();
        }
    }
}
```

Output:-





Output on Console:-

Q.2. Create a MVC program for calculating the fuel economy in L/100 km when the fuel economy is given in km/L. Display the output using View Bag.

Program.cs:-

```
namespace FuelEconomyCalculator
{
    public class Program
    {
        public static void Main(string[] args)
        {
            var builder = WebApplication.CreateBuilder(args);

            // Add services to the container.
            builder.Services.AddControllersWithViews();

            var app = builder.Build();

            // Configure the HTTP request pipeline.
            if (!app.Environment.IsDevelopment())
            {
                app.UseExceptionHandler("/Home/Error");
            }
            app.UseStaticFiles();

            app.UseRouting();

            app.UseAuthorization();

            app.MapControllerRoute(
                name: "default",
                pattern: "{controller=Home}/{action=Index}/{id?}");

            app.Run();
        }
    }
}
```

HomeController:-

```
using FuelEconomyCalculator.Models;
using Microsoft.AspNetCore.Mvc;
using System.Diagnostics;

namespace FuelEconomyCalculator.Controllers
{
    public class HomeController : Controller
    {
        private readonly ILogger<HomeController> _logger;
```

```
        public HomeController(ILogger<HomeController> logger)
        {
            _logger = logger;
        }

        public IActionResult Index()
        {
            return View();
        }

        [HttpPost]
        public ActionResult Calculate(double fuelEconomy)
        {
            double fuelConsumption = 100 / fuelEconomy;
            ViewBag.FuelConsumption = fuelConsumption;

            return View("Index");
        }

        public IActionResult Privacy()
        {
            return View();
        }

        [ResponseCache(Duration = 0, Location = ResponseCacheLocation.None, NoStore
= true)]
        public IActionResult Error()
        {
            return View(new ErrorViewModel { RequestId = Activity.Current?.Id ??
HttpContext.TraceIdentifier });
        }
    }
}
```

Index.cshtml:-

```
@{
    ViewBag.Title = "Fuel Economy Calculator";
}

<h2>Fuel Economy Calculator</h2>
<br />
<br />

@using (Html.BeginForm("Calculate", "Home", FormMethod.Post))
{
    <div class="form-group">
        @Html.Label("Fuel Economy (km/L): ")
        @Html.TextBox("fuelEconomy", null, new { @class = "form-control" })
    </div>
    <br />
    <br />
    <button type="submit" class="btn btn-primary">Calculate</button>
```

```
}

<br />

@if (ViewBag.FuelConsumption != null)
{
    <h3>The Fuel Consumption is @ViewBag.FuelConsumption L/100 KM.</h3>
}
```

Output:-