

## CODE :

```
using System;
using System.Collections.Generic;
using System.IO;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace SearchAndSort
{
    internal class Program
    {
        static void Main(string[] args)
        {
            string searchingandsorting = @"D:\Projects\Studentdata.txt";
            FileStream file = new FileStream(searchingandsorting, FileMode.Open,
            FileAccess.Read);
            StreamReader read = new StreamReader(file);
            List<Student> list = new List<Student>();
            while (!read.EndOfStream)
            {
                string k = read.ReadLine();
                char[] c = new char[]
                { ' ', '\t' };
                string[] stu = k.Split(c, StringSplitOptions.None);
                Student S = new Student();
                S.Name = stu[0];
                S.Class = Convert.ToInt32(stu[1]);
                list.Add(S);
            }
            read.Close();
            file.Close();
            file.Dispose();
            file.Dispose();

            start:
            Console.WriteLine(" 1 sort by class\n 2 sort by Name\n 3.search through
            Name\n 4.search through class\n 5.Display the Info of Students\n");
            Console.WriteLine("Enter the number");
            int ch = Convert.ToInt32(Console.ReadLine());
            switch (ch)
            {
                case 1:
                    Console.WriteLine("sort by class");
                    var par = list.OrderBy(q => q.Class).ToList();
                    foreach (Student s in par)
                    {
                        Console.WriteLine($"{s.Name} is studying in {s.Class}\n");
                    }
                    Console.WriteLine("-----");
                    break;

                case 2:
                    Console.WriteLine("sort by Name");
                    var par1 = list.OrderBy(q => q.Name).ToList();
                    foreach (Student s in par1)
                    {
                        Console.WriteLine($"{s.Name} is studying in {s.Class}\n");
                    }
            }
        }
    }
}
```

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        Console.WriteLine("-----");
        break;
    case 3:
        Console.WriteLine("search through Name");
        foreach (Student s in list)
        {
            Console.WriteLine($"{s.Name} is studying in {s.Class} \n");
        }
        Console.WriteLine("Enter the name you want to search");
        string pr = Console.ReadLine();
        var pit = list.Where(q => q.Name == pr).ToList();
        if (pit != null)
        {
            foreach (Student s in pit)
            {
                Console.WriteLine($"{s.Name} is studying in {s.Class}
\n");
            }
        }
        else
        {
            Console.WriteLine("sorry nothing to search.....");
        }
        Console.WriteLine("-----");
        break;
    case 4:
        Console.WriteLine("Search through Class");
        foreach (Student s in list)
        {
            Console.WriteLine($"{s.Name} studying in {s.Class} \n");
        }
        Console.WriteLine("Enter Class you want to search");
        int pr1 = Convert.ToInt32(Console.ReadLine());
        var pit1 = list.Where(q => q.Class == pr1).ToList();
        if (pit1 != null)
        {
            foreach (Student s in pit1)
            {
                Console.WriteLine($"{s.Name} is studying in
{s.Class}\n");
            }
        }
        else
        {
            Console.WriteLine("No students in Class");
        }
        Console.WriteLine("-----");
        break;
    case 5:
        Console.WriteLine("Display");
        foreach (Student s in list)
        {
            Console.WriteLine($"{s.Name} studying in {s.Class} \n");
        }
        Console.WriteLine("-----");
        break;
    }
    Console.WriteLine("Type Enter to Continue");
    string pnt = Console.ReadLine();
    if (pnt == "Enter")
    {

```

```
        goto start;
    }
}
public class Student
{
    public string Name { get; set; }
    public int Class { get; set; }
}
}
```

**GIT Link :** <https://github.com/sundar2568223/studentProject-2.git>