**Source Code**

**Student**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace SchoolLibrary

{

public class Student

{

public string Name { get; set; }

public string ClassAndSection { get; set; }

}

}

**Teacher**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace SchoolLibrary

{

public class Teacher

{

public string Name { get; set; }

public string ClassAndSection { get; set; }

}

}

**Subject**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace SchoolLibrary

{

public class Subject

{

public string Name { get; set; }

public string SubjectCode { get; set; }

public Teacher Teacher { get; set; }

}

}

**SchoolSystem**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace SchoolLibrary

{

public class SchoolSystem

{

public static void FillStudentList(List<Student> students)

{

students.Add(new Student { Name = "John Doe", ClassAndSection = "10A" });

students.Add(new Student { Name = "Jane Doe", ClassAndSection = "10B" });

}

public static void FillTeacherList(List<Teacher> teachers)

{

teachers.Add(new Teacher { Name = "Mr. Smith", ClassAndSection = "10A" });

teachers.Add(new Teacher { Name = "Ms. Jones", ClassAndSection = "10B" });

}

public static void FillSubjectList(List<Subject> subjects)

{

subjects.Add(new Subject { Name = "Math", SubjectCode = "MATH101", Teacher = new Teacher{ Name = "Mr. Smith"}});

subjects.Add(new Subject { Name = "Science", SubjectCode = "SCI101", Teacher = new Teacher { Name = "Ms. Jones" }});

}

public static void DisplayStudentList(List<Student> students)

{

Console.WriteLine("Student List:");

foreach (Student student in students)

{

Console.WriteLine($"Name: {student.Name}, Class and Section: {student.ClassAndSection}");

}

}

public static void DisplayTeacherList(List<Teacher> teachers)

{

Console.WriteLine();

Console.WriteLine("Teacher List:");

foreach (Teacher teacher in teachers)

{

Console.WriteLine($"Name: {teacher.Name}, Class and Section: {teacher.ClassAndSection}");

}

}

public static void DisplaySubjectList(List<Subject> subjects)

{

Console.WriteLine();

Console.WriteLine("Subject List:");

foreach (Subject subject in subjects)

{

Console.WriteLine($"Name: {subject.Name}, Subject Code: {subject.SubjectCode}, Teacher: {subject.Teacher.Name}");

}

}

}

}

**Program**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using SchoolLibrary;

namespace SchoolManagementSystem

{

internal class Program

{

static void Main(string[] args)

{

List<Student> students = new List<Student>();

List<Teacher> teachers = new List<Teacher>();

List<Subject> subjects = new List<Subject>();

SchoolSystem.FillStudentList(students);

SchoolSystem.FillTeacherList(teachers);

SchoolSystem.FillSubjectList(subjects);

SchoolSystem.DisplayStudentList(students);

SchoolSystem.DisplayTeacherList(teachers);

SchoolSystem.DisplaySubjectList(subjects);

Console.ReadLine();

}

}

}