Let us understand the **difference between Select and SelectMany**with an example.   
  
   
  
We will be using the following **Student**class in this demo. **Subjects**property in this class is a collection of strings.

public class Student

{

    public string Name { get; set; }

    public string Gender { get; set; }

    public List<string> Subjects { get; set; }

    public static List<Student> GetAllStudetns()

    {

        List<Student> listStudents = new List<Student>

        {

            new Student

            {

                Name = "Tom",

                Gender = "Male",

                Subjects = new List<string> { "ASP.NET", "C#" }

            },

            new Student

            {

                Name = "Mike",

                Gender = "Male",

                Subjects = new List<string> { "ADO.NET", "C#", "AJAX" }

            },

            new Student

            {

                Name = "Pam",

                Gender = "Female",

                Subjects = new List<string> { "WCF", "SQL Server", "C#" }

            },

            new Student

            {

                Name = "Mary",

                Gender = "Female",

                Subjects = new List<string> { "WPF", "LINQ", "ASP.NET" }

            },

        };

        return listStudents;

    }

}

In this example, the **Select()**method returns **List of List<string>**. To print all the subjects we will have to use **2 nested foreach loops**.

IEnumerable<List<string>> result = Student.GetAllStudetns().Select(s => s.Subjects);

foreach (List<string> stringList in result)

{

    foreach (string str in stringList)

    {

        Console.WriteLine(str);

    }

}

**SelectMany()** on the other hand, flattens queries that return lists of lists into a **single list.**So in this case to print all the subjects we have to use just one foreach loop.

IEnumerable<string> result = Student.GetAllStudetns().SelectMany(s => s.Subjects);

foreach (string str in result)

{

    Console.WriteLine(str);

}

**Output:**   
