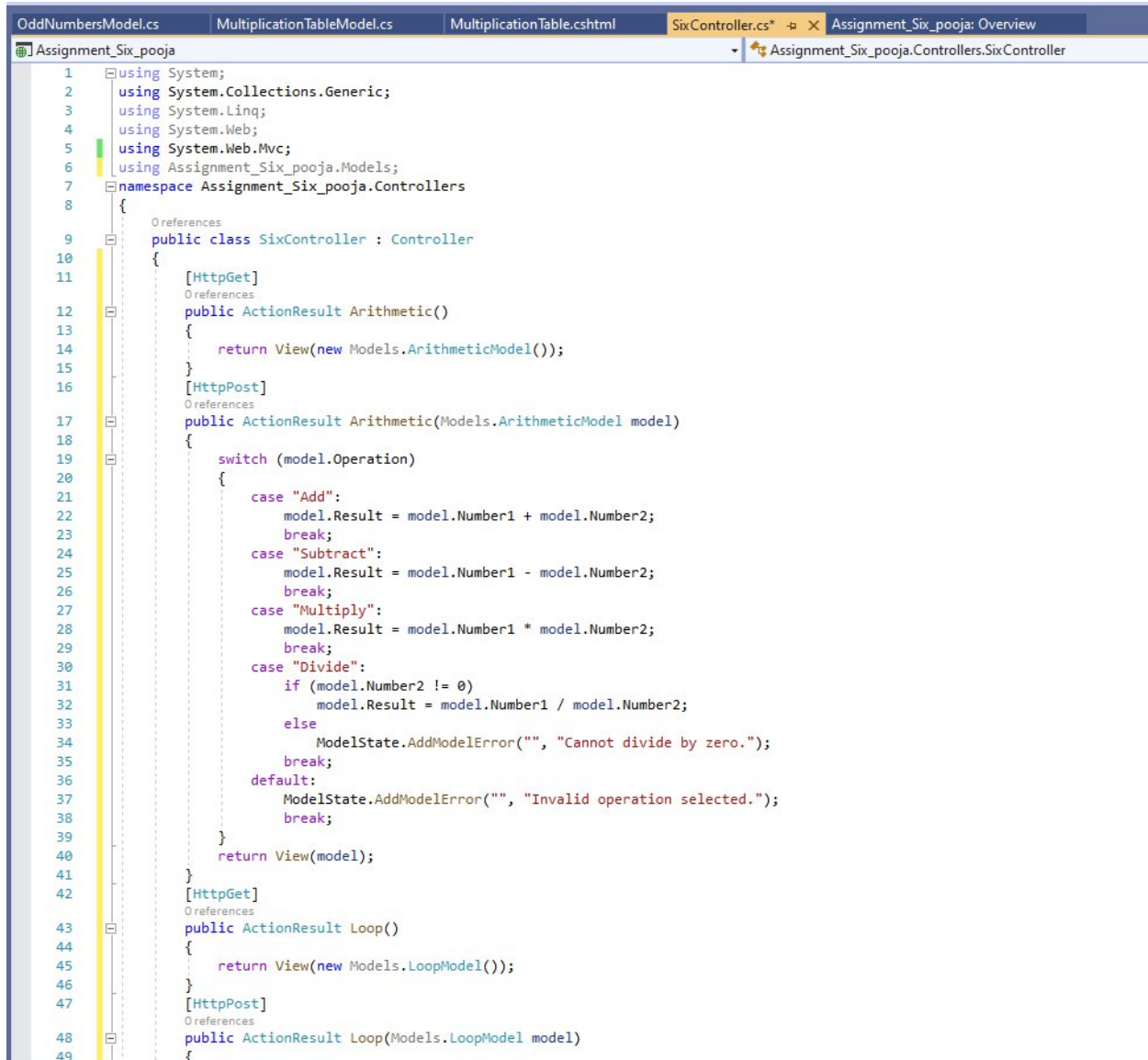


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Enrollment no: 240823101

## Assignment-6

### Controller:



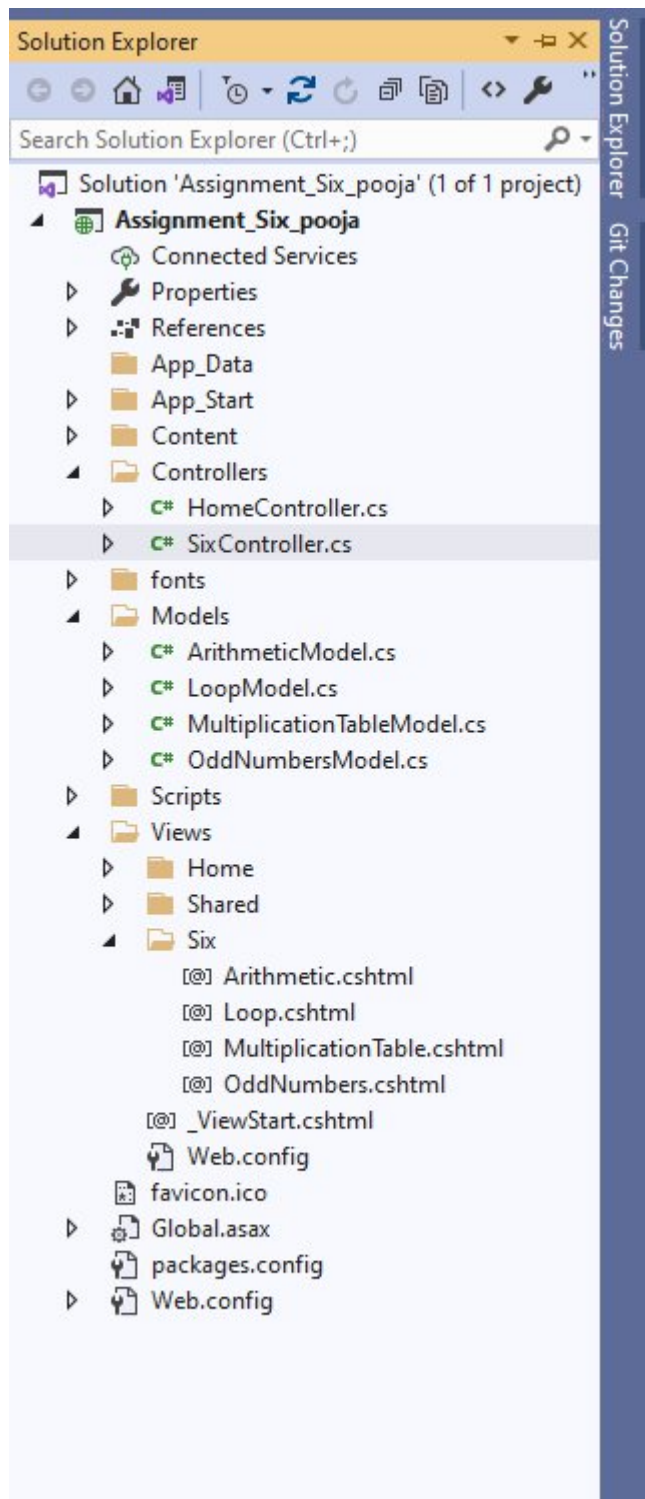
```
1  using System;
2  using System.Collections.Generic;
3  using System.Linq;
4  using System.Web;
5  using System.Web.Mvc;
6  using Assignment_Six_pooja.Models;
7  namespace Assignment_Six_pooja.Controllers
8  {
9      public class SixController : Controller
10     {
11         [HttpGet]
12         public ActionResult Arithmetic()
13         {
14             return View(new Models.ArithmeticModel());
15         }
16         [HttpPost]
17         public ActionResult Arithmetic(Models.ArithmeticModel model)
18         {
19             switch (model.Operation)
20             {
21                 case "Add":
22                     model.Result = model.Number1 + model.Number2;
23                     break;
24                 case "Subtract":
25                     model.Result = model.Number1 - model.Number2;
26                     break;
27                 case "Multiply":
28                     model.Result = model.Number1 * model.Number2;
29                     break;
30                 case "Divide":
31                     if (model.Number2 != 0)
32                         model.Result = model.Number1 / model.Number2;
33                     else
34                         ModelState.AddModelError("", "Cannot divide by zero.");
35                     break;
36                 default:
37                     ModelState.AddModelError("", "Invalid operation selected.");
38                     break;
39             }
40             return View(model);
41         }
42         [HttpGet]
43         public ActionResult Loop()
44         {
45             return View(new Models.LoopModel());
46         }
47         [HttpPost]
48         public ActionResult Loop(Models.LoopModel model)
49         {
```

OddNumbersModel.csMultiplicationTableModel.csMultiplicationTable.cshtmlSixController.cs\*Assignment\_Six\_pooja: Overview

Assignment\_Six\_poojaAssignment\_Six\_pooja.Controllers.SixControll

```
46 }
47 [HttpPost]
48 0 references
49 public ActionResult Loop(Models.LoopModel model)
50 {
51     model.Numbers = new List<int>();
52     for (int i = 1; i <= model.N; i++)
53     {
54         model.Numbers.Add(i);
55     }
56     return View(model);
57 }
58 [HttpGet]
59 0 references
60 public ActionResult OddNumbers()
61 {
62     return View(new Models.OddNumbersModel());
63 }
64 [HttpPost]
65 0 references
66 public ActionResult OddNumbers(Models.OddNumbersModel model)
67 {
68     model.OddNumbers = new List<int>();
69     for (int i = 1; i <= model.N; i++)
70     {
71         if (i % 2 != 0)
72         {
73             model.OddNumbers.Add(i);
74         }
75     }
76     return View(model);
77 }
78 [HttpGet]
79 0 references
80 public ActionResult MultiplicationTable()
81 {
82     return View(new Models.MultiplicationTableModel());
83 }
84 [HttpPost]
85 0 references
86 public ActionResult MultiplicationTable(Models.MultiplicationTableModel model)
87 {
88     model.Table = new List<string>();
89     for (int i = 1; i <= 10; i++)
90     {
91         int result = model.N * i;
92         model.Table.Add($"{model.N} x {i} = {result}");
93     }
94     return View(model);
95 }
96 }
```

## Solution Explorer:



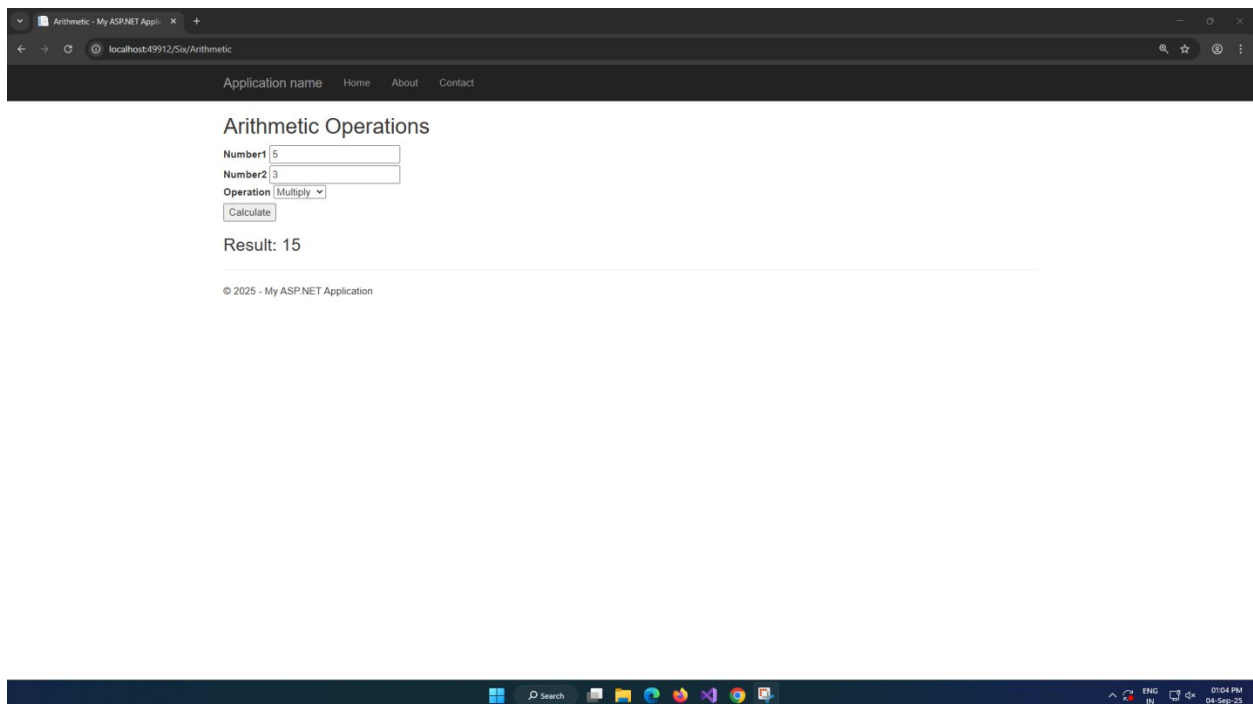
## Arithmetic:

```
Arithmetic.cshtml* | ArithmeticModel.cs | SixController.cs | Assignment_Six_pooja: Overview
Assignment_Six_pooja | Assignment_Six_pooja.Mo

1  using System;
2  using System.Collections.Generic;
3  using System.Linq;
4  using System.Web;
5
6  namespace Assignment_Six_pooja.Models
7  {
8      4 references
9      public class ArithmeticModel
10     {
11         6 references
12         public double Number1 { get; set; }
13         7 references
14         public double Number2 { get; set; }
15         3 references
16         public string Operation { get; set; }
17         6 references
18         public double? Result { get; set; }
19     }
20 }
```

```
Arithmetic.cshtml* x ArithmeticModel.cs SixController.cs Assignment_Six_pooja Overview
1 @model Assignment_Six_pooja.Models.ArithmeticModel
2 @{ ViewBag.Title = "Arithmetic"; }
3 <h2>Arithmetic Operations</h2>
4 @using (Html.BeginForm())
5 {
6     <div>
7         @Html.LabelFor(m => m.Number1)
8         @Html.TextBoxFor(m => m.Number1)
9     </div><div>
10        @Html.LabelFor(m => m.Number2)
11        @Html.TextBoxFor(m => m.Number2)
12    </div><div>
13        @Html.LabelFor(m => m.Operation)
14        @Html.DropDownListFor(m => m.Operation, new SelectList(new[]
15        {
16            new { Value = "Add", Text = "Add" },
17            new { Value = "Subtract", Text = "Subtract" },
18            new { Value = "Multiply", Text = "Multiply" },
19            new { Value = "Divide", Text = "Divide" }
20        }, "Value", "Text"))
21    </div>
22    <div><input type="submit" value="Calculate" /></div>
23 }
24 @if (Model.Result != null)
25 {
26     <h3>Result: @Model.Result</h3>
27 }
28 @if (!ViewData.ModelState.IsValid)
29 {
30     foreach (var error in ViewData.ModelState.Values.SelectMany(v => v.Errors))
31     {
32         <p style="color:red">@error.ErrorMessage</p>
33     }
34 }
```

## Output:



## Loop:

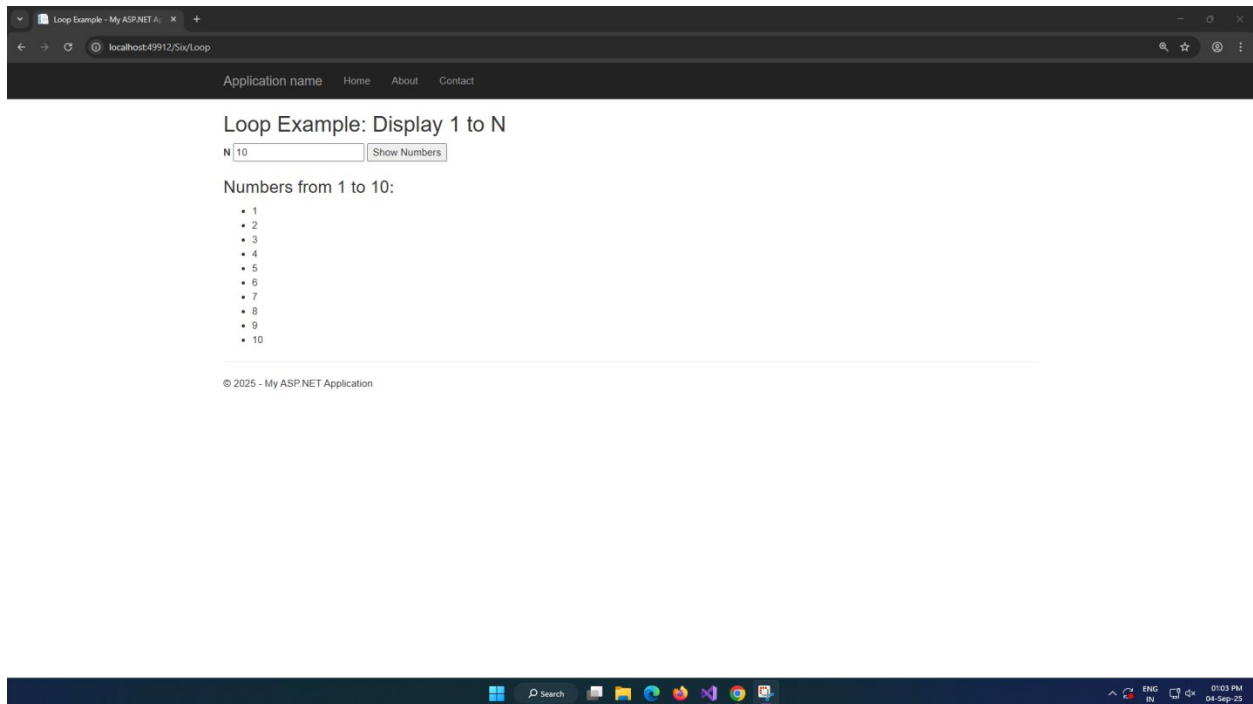
```
Loop.cshtml*  LoopModel.cs  SixController.cs  Assignment_Six_pooja: Overview
Assignment_Six_pooja  Assignment_Six_pooja.Models.LoopModel

1  using System;
2  using System.Collections.Generic;
3  using System.Linq;
4  using System.Web;
5
6  namespace Assignment_Six_pooja.Models
7  {
8      public class LoopModel
9      {
10         public int N { get; set; }
11         public List<int> Numbers { get; set; }
12     }
13 }
14
15
16
17
```

```
Loop.cshtml*  LoopModel.cs  SixController.cs  Assignment_Six_pooja: Overview

1  @model Assignment_Six_pooja.Models.LoopModel
2  @{ ViewBag.Title = "Loop Example"; }
3
4  <h2>Loop Example: Display 1 to N</h2>
5  @using (Html.BeginForm())
6  {
7      <div>
8          @Html.LabelFor(m => m.N)
9          @Html.TextBoxFor(m => m.N)
10         <input type="submit" value="Show Numbers" />
11     </div>
12
13     @if (Model.Numbers != null && Model.Numbers.Count > 0)
14     {
15         <h3>Numbers from 1 to @Model.N:</h3>
16         <ul>
17             @foreach (var number in Model.Numbers)
18             {
19                 <li>@number</li>
20             }
21         </ul>
22     }
23 }
```

## Output:





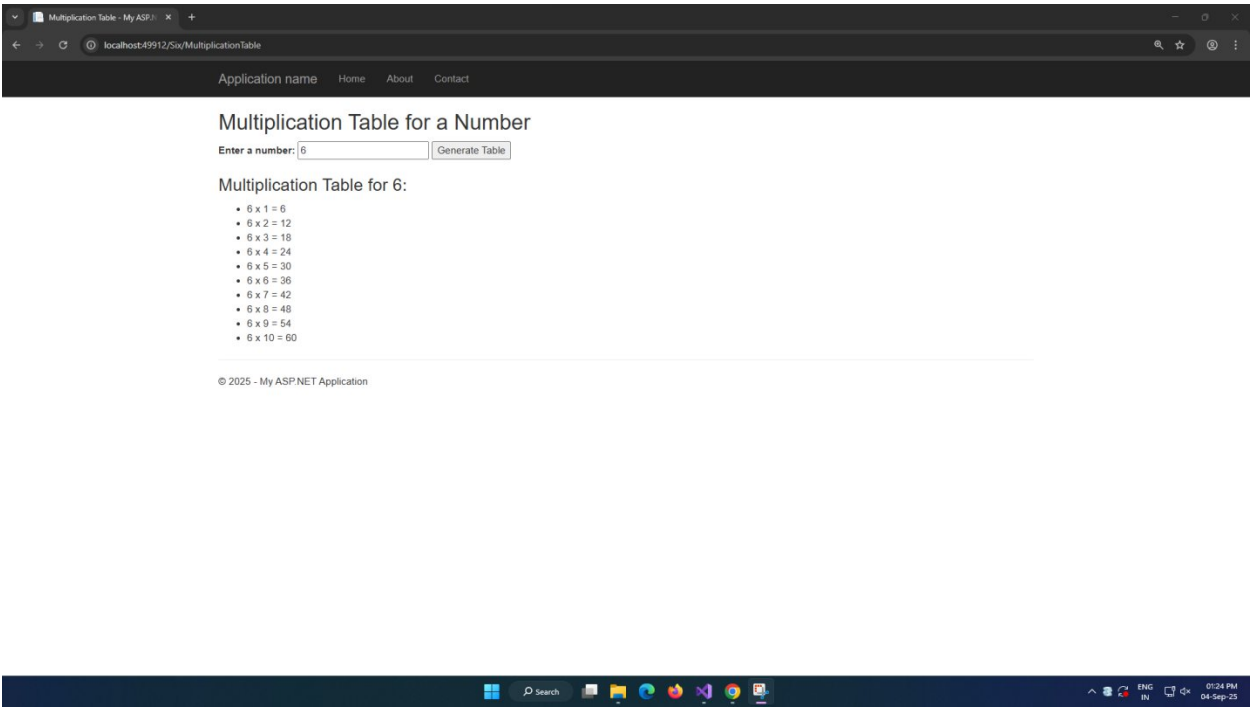
## MultiplicationTable:

```
MultiplicationTableModel.cs MultiplicationTable.cshtml SixController.cs Assignment_Six_pooja: Overview
Assignment_Six_pooja
1 using System;
2 using System.Collections.Generic;
3 using System.Linq;
4 using System.Web;
5
6 namespace Assignment_Six_pooja.Models
7 {
8     4 references
9     public class MultiplicationTableModel
10    {
11        5 references
12        public int N { get; set; }
13        5 references
14        public List<string> Table { get; set; }
15    }
16 }
```

```
MultiplicationTableModel.cs MultiplicationTable.cshtml SixController.cs Assignment_Six_pooja: Overview
1 @model Assignment_Six_pooja.Models.MultiplicationTableModel
2
3 @{ ViewBag.Title = "Multiplication Table"; }
4
5 <h2>Multiplication Table for a Number</h2>
6
7 @using (Html.BeginForm())
8 {
9
10
11 <div>
12
13     @Html.LabelFor(m => m.N, "Enter a number:")
14
15     @Html.TextBoxFor(m => m.N)
16
17     <input type="submit" value="Generate Table" />
18
19 </div>
20
21 @if (Model.Table != null && Model.Table.Count > 0)
22 {
23     <h3>Multiplication Table for @Model.N:</h3>
24     <ul>
25         @foreach (var line in Model.Table)
26         {
27             <li>@line</li>
28         }
29     </ul>
30 }
```



Output:



## OddNumbers:

```
OddNumbers.cshtml*  OddNumbersModel.cs  SixController.cs  Assignment_Six_pooja: Overview
Assignment_Six_pooja  Assignment_Six_pooja.Models.OddNumbersModel

1  using System;
2  using System.Collections.Generic;
3  using System.Linq;
4  using System.Web;
5
6  namespace Assignment_Six_pooja.Models
7  {
8      public class OddNumbersModel
9      {
10         public int N { get; set; }
11         public List<int> OddNumbers { get; set; }
12     }
13 }
14
15
```

```
OddNumbers.cshhtml* -> x OddNumbersModel.cs SixController.cs Assignment_Six_pooja: Overview
1 @model Assignment_Six_pooja.Models.OddNumbersModel
2
3 @{ ViewBag.Title = "Odd Numbers Generator"; }
4
5 <h2>Display Odd Numbers from 1 to N</h2>
6
7 @using (Html.BeginForm())
8 {
9
10
11 <div>
12
13     @Html.LabelFor(m => m.N, "Enter a number:")
14
15     @Html.TextBoxFor(m => m.N)
16
17     <input type="submit" value="Generate" />
18
19 </div>
20
21 @if (Model.OddNumbers != null && Model.OddNumbers.Count > 0)
22 {
23     <h3>Odd Numbers from 1 to @Model.N:</h3>
24     <ul>
25         @foreach (var num in Model.OddNumbers)
26         {
27             <li>@num</li>
28         }
29     </ul>
30 }
31
```

## Output:

