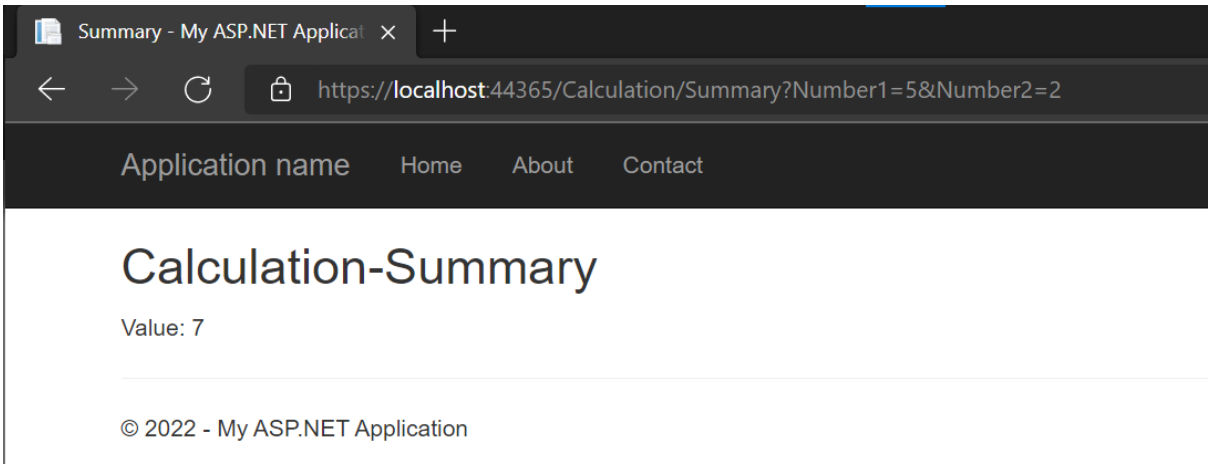
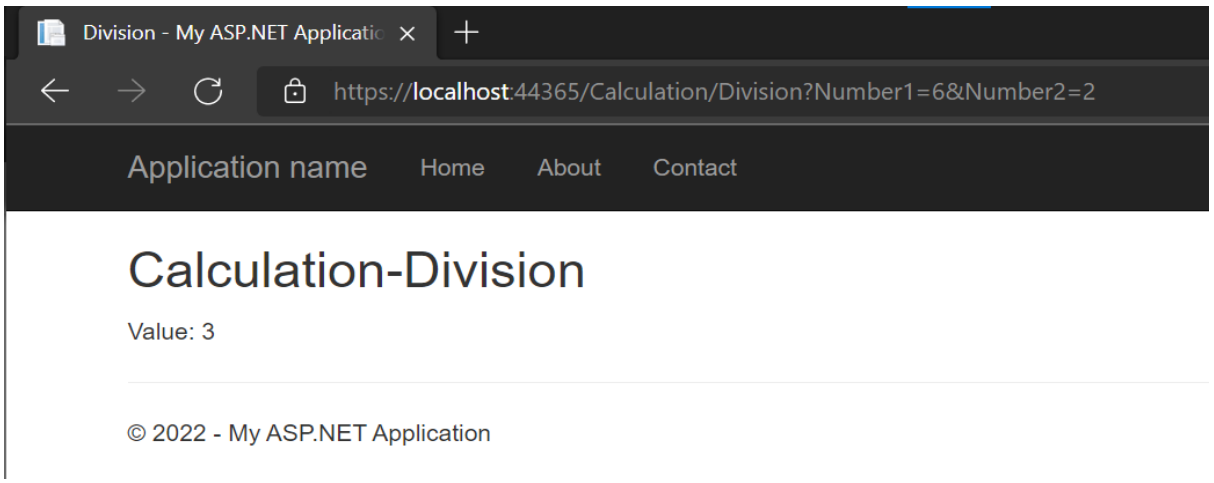
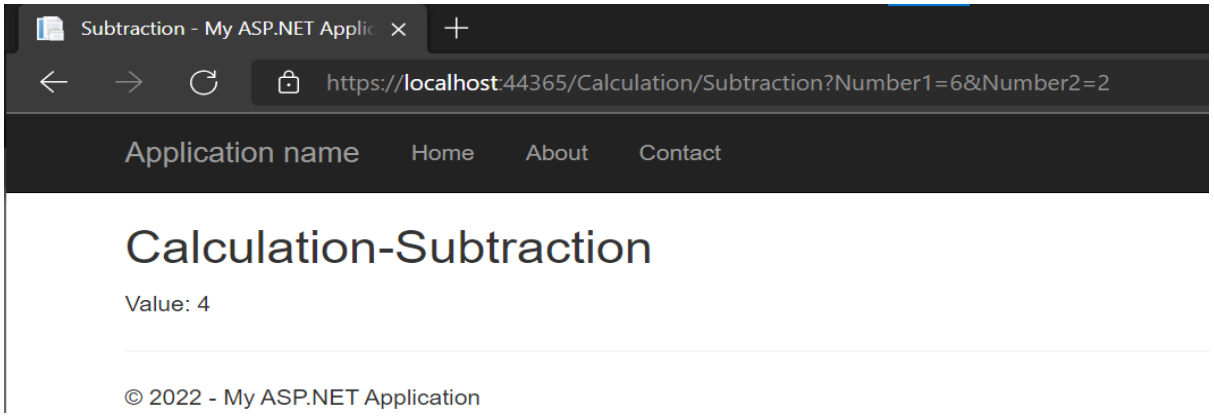
LAB_01

```
9
10  namespace Lab01_MVC.Controllers
11  {
        0 references
12      public class CalculationController : Controller
13      {
14          // GET: Calculation
            8 references
15          public bool IsNumber(string pText)
16          {
17              Regex regex = new Regex(@"^[-+]?[0-9]*.?[0-9]+$");
18              return regex.IsMatch(pText);
19          }
20
            0 references
21          public ActionResult Index()
22          {
23              return View();
24          }
25
26          // "+"
            0 references
27          public ActionResult Summary()
28          {
29              string strNumber1 = Request.QueryString["Number1"];
30              string strNumber2 = Request.QueryString["Number2"];
31
32              if (IsNumber(strNumber1) == true && IsNumber(strNumber2) == true)
33              {
34                  int sum = Convert.ToInt32(strNumber1) + Convert.ToInt32(strNumber2);
35                  return View((object)sum.ToString());
36              }
37              else
38              {
39                  return View((object)("Invalid ! Your Input must be a number"));
40              }
41          }
42
```

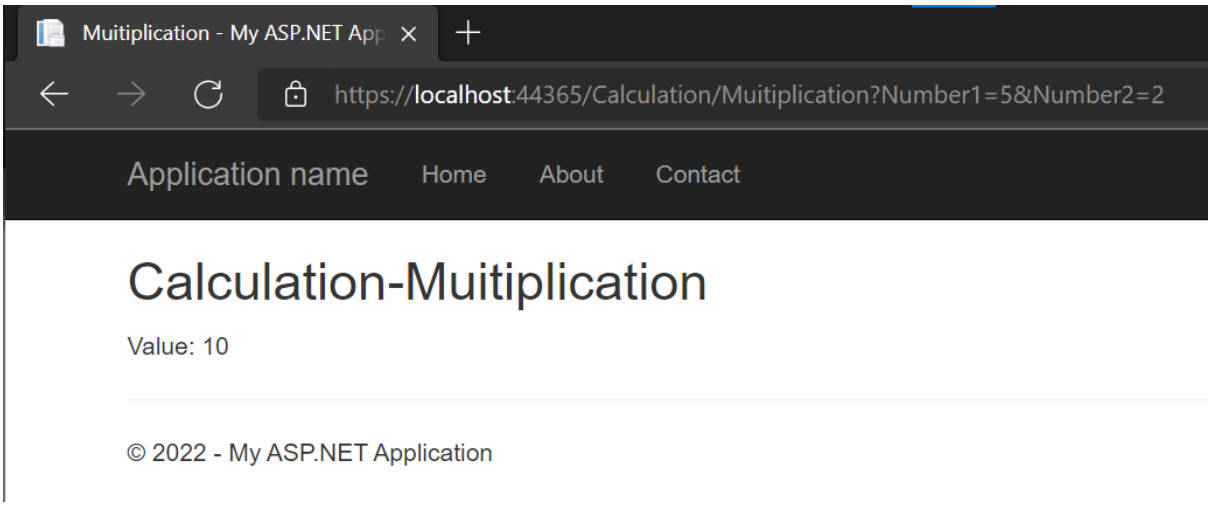


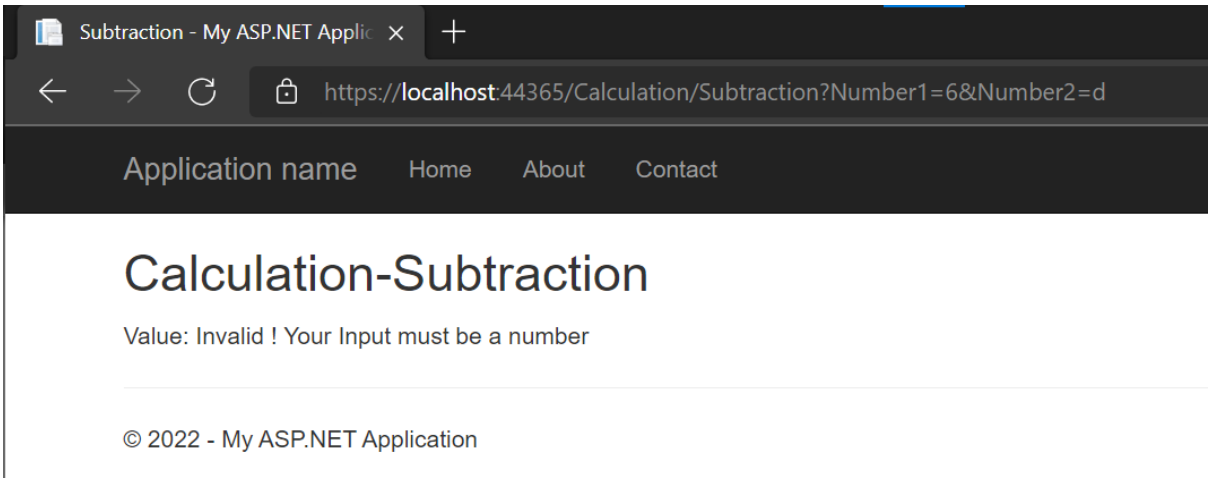
```
43          // "/"
            0 references
44          public ActionResult Division()
45          {
46              string strNumber1 = Request.QueryString["Number1"];
47              string strNumber2 = Request.QueryString["Number2"];
48
49
50              if (IsNumber(strNumber1) == true && IsNumber(strNumber2) == true)
51              {
52                  int div = Convert.ToInt32(strNumber1) / Convert.ToInt32(strNumber2);
53                  return View((object)div.ToString());
54              }
55              else
56              {
57                  return View((object)("Invalid ! Your Input must be a number"));
58              }
59
60
61          }
62
63          // "-"
            0 references
64          public ActionResult Subtraction()
65          {
66              string strNumber1 = Request.QueryString["Number1"];
67              string strNumber2 = Request.QueryString["Number2"];
68
69              if (IsNumber(strNumber1) == true && IsNumber(strNumber2) == true)
70              {
71                  int sub = Convert.ToInt32(strNumber1) - Convert.ToInt32(strNumber2);
72                  return View((object)sub.ToString());
73              }
74              else
75              {
76                  return View((object)("Invalid ! Your Input must be a number"));
77              }
78          }
```



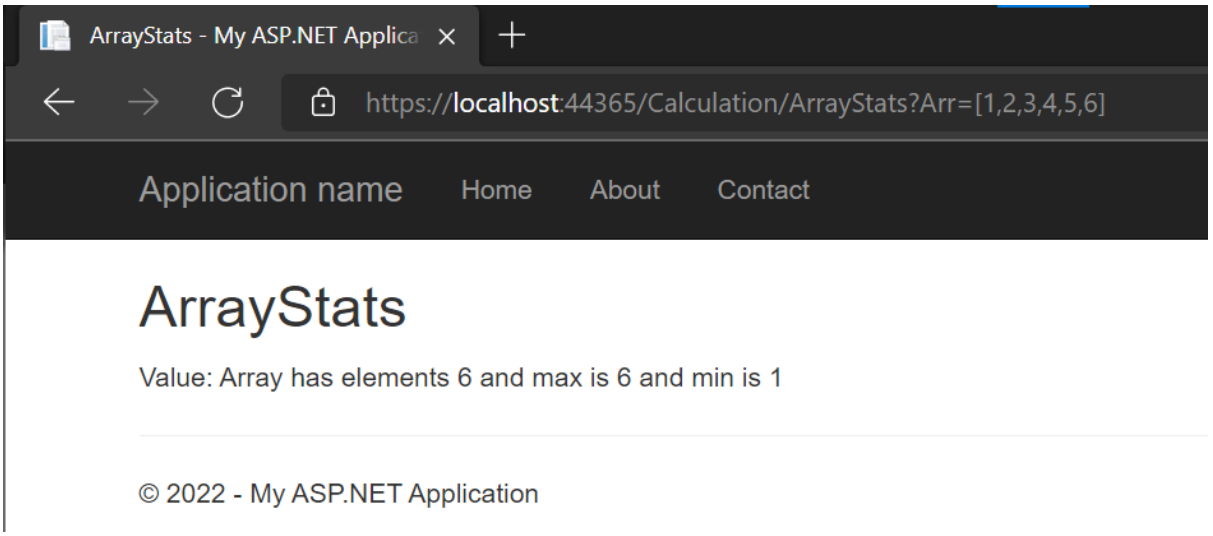


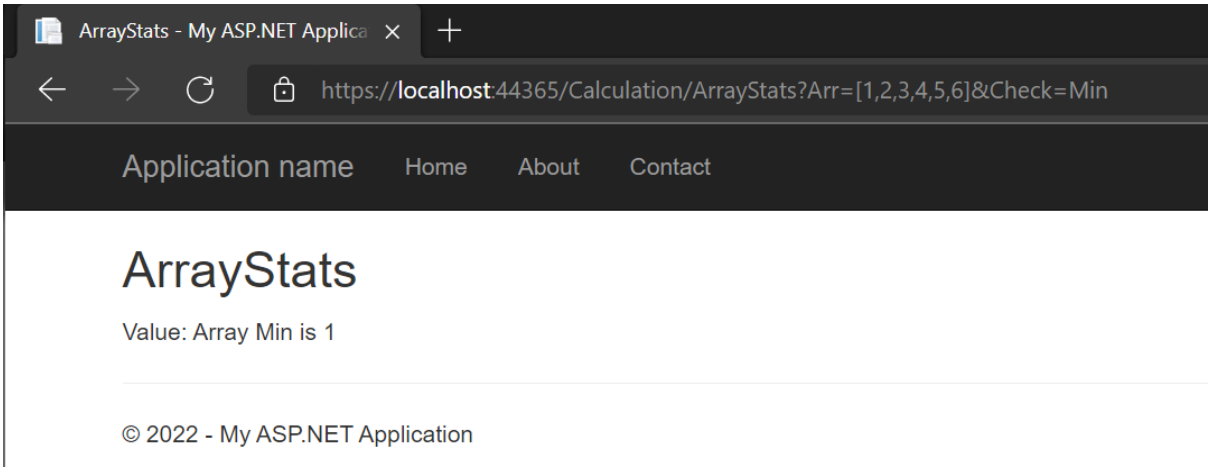
```
78          }
79
80          // "*"
            0 references
81          public ActionResult Muitiplication()
82          {
83              string strNumber1 = Request.QueryString["Number1"];
84              string strNumber2 = Request.QueryString["Number2"];
85
86
87              if (IsNumber(strNumber1) == true && IsNumber(strNumber2) == true)
88              {
89                  int mui = Convert.ToInt32(strNumber1) * Convert.ToInt32(strNumber2);
90                  return View((object)mui.ToString());
91              }
92              else
93              {
94                  return View((object)("Invalid ! Your Input must be a number"));
95              }
96          }
97
```

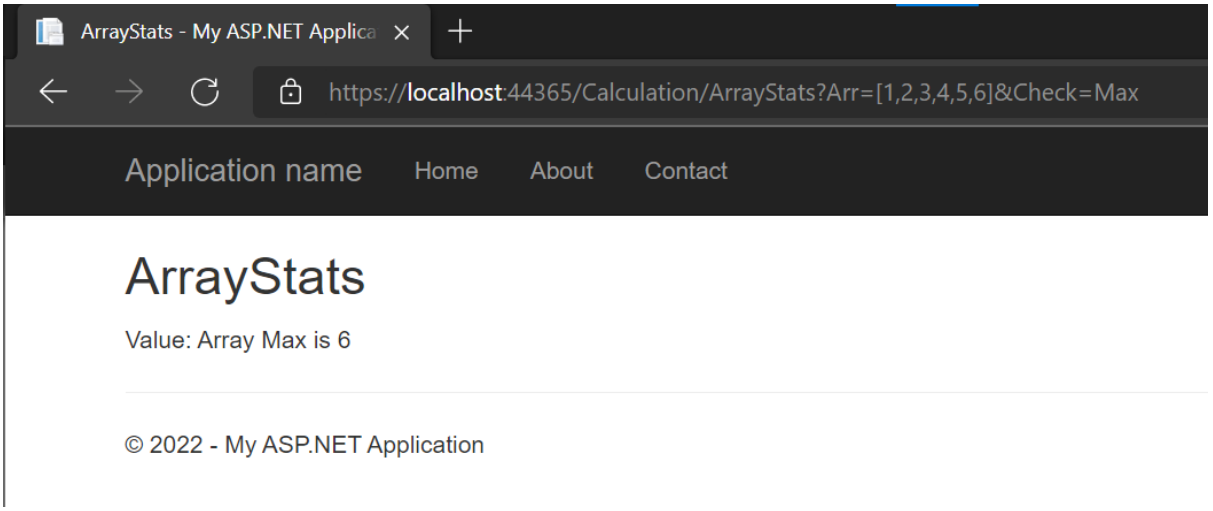


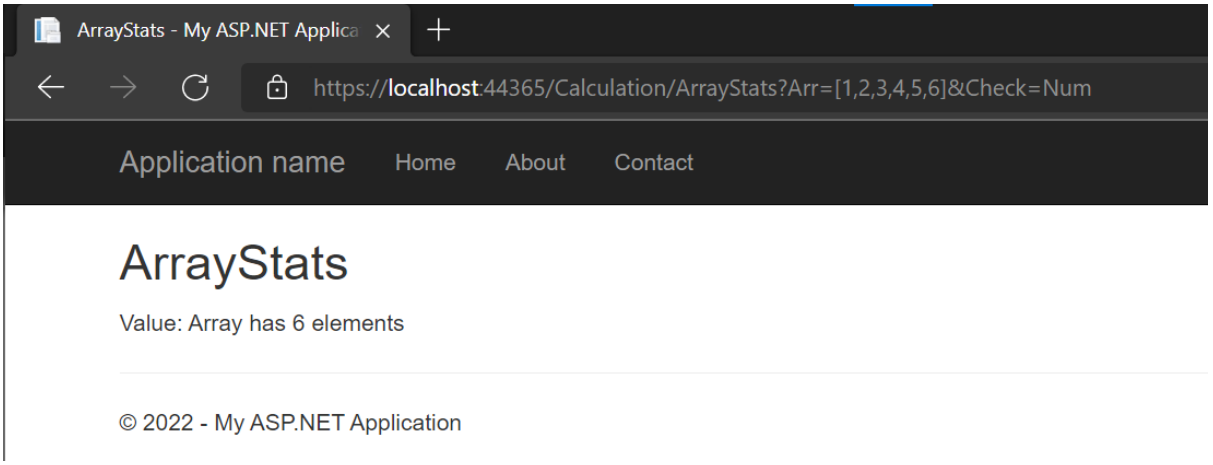


```
97
98      //Input http://localhost:1457/Calculation/ArrayStats?Arr=[1, 2, 3, 4, 5]
99      //Output : Array has 5 elements  and max is 5 and min is 1
100
        0 references
101     public ActionResult ArrayStats()
102         {
103         string Arr = Request.QueryString["Arr"];
104         string Check = Request.QueryString["Check"];
105
106         int max = 0;
107         int min = 90;
108         for (int i = 0; i < Arr.Length; i++)
109         {
110
111             if (Arr[i] > max && Arr[i] <= 57 && Arr[i] >= 48)
112             {
113                 max = Arr[i];
114             }
115
116             if (Arr[i] < min && Arr[i] <= 57 && Arr[i] >= 48)
117             {
118                 min = Arr[i];
119             }
120         }
121
122         int a = max - '0';
123         int b = min - '0';
124         int c = ((Arr.Length - 1) / 2);
125
126         //Check Min
127         if(String.Compare(Check, "Min", true) == 0)
128         {
129             return View((object)("Array Min is " + b));
130         }
131         //Check Max
132         else if(String.Compare(Check, "Max", true) == 0)
133         {
134             return View((object)("Array Max is " + a));
135         }
136         //Check Num
137         else if (String.Compare(Check, "Num", true) == 0)
138         {
139             return View((object)("Array has " + c + " elements"));
140         }
141
142         return View((object)("Array has elements " + c.ToString() + " and max is " + a.ToString() + " and min is " + b.ToString()));
143     }
144
```

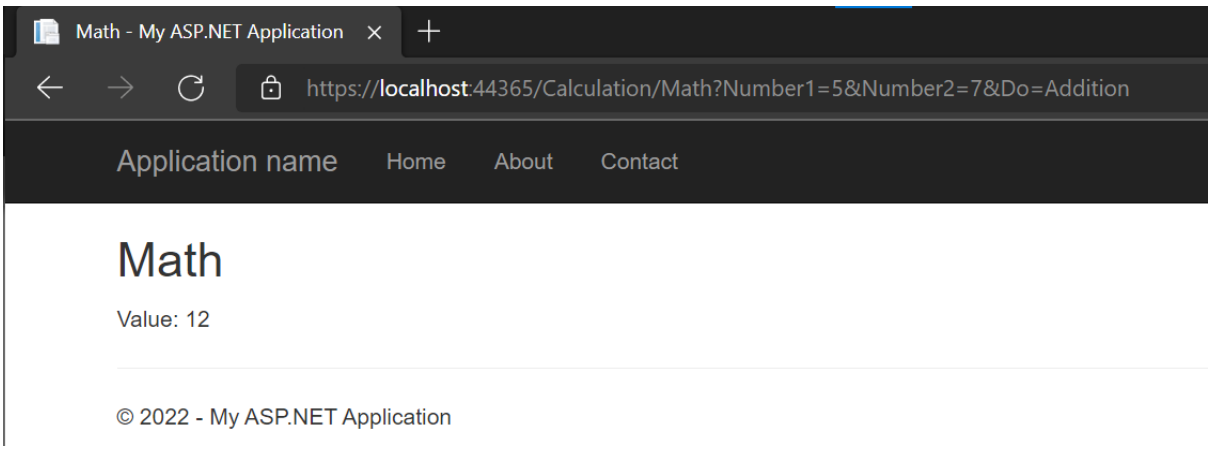


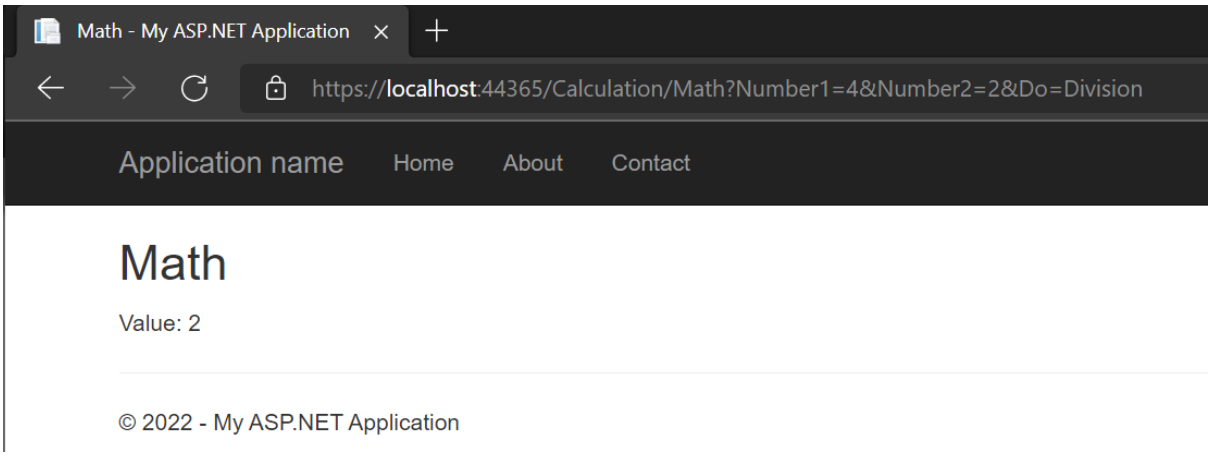

ArrayStats - My ASP.NET Applica
https://localhost:44365/Calculation/ArrayStats?Arr=[1,2,3,4,5,6]&Check=Min
Application name
Home
About
Contact
ArrayStats
Value: Array Min is 1
© 2022 - My ASP.NET Application

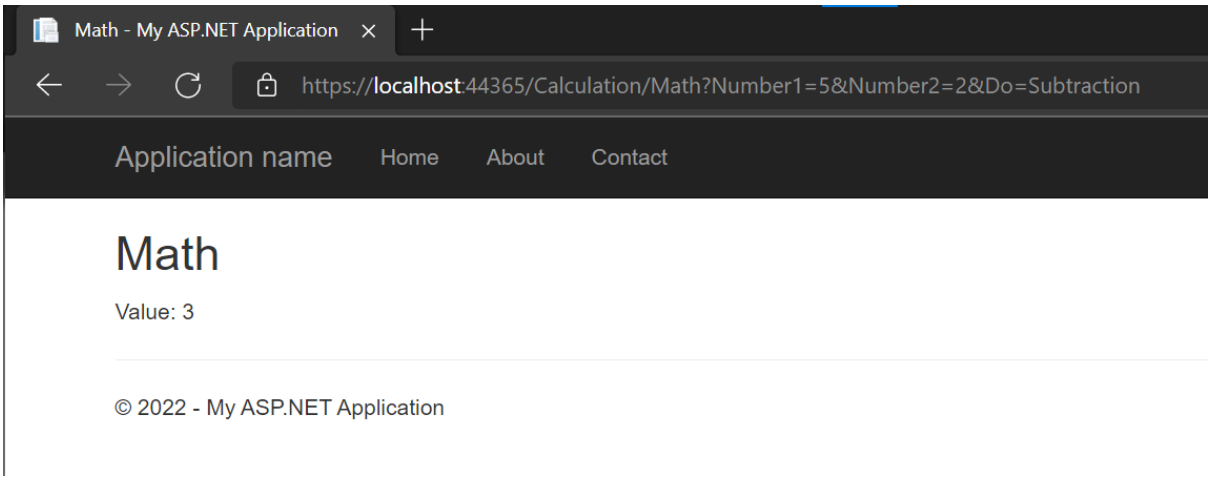

ArrayStats - My ASP.NET Applica
https://localhost:44365/Calculation/ArrayStats?Arr=[1,2,3,4,5,6]&Check=Max
Application name
Home
About
Contact
ArrayStats
Value: Array Max is 6
© 2022 - My ASP.NET Application

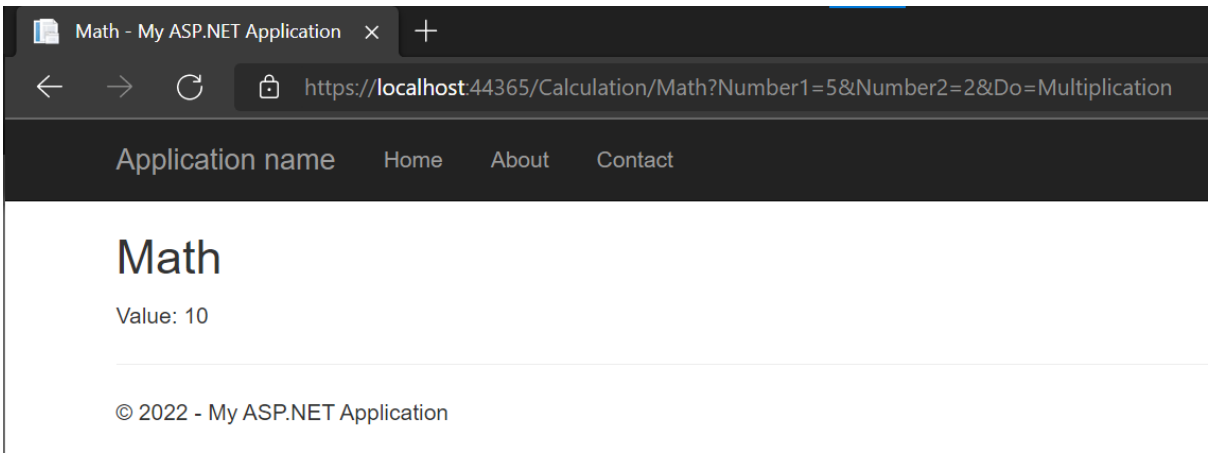

ArrayStats - My ASP.NET Applica
https://localhost:44365/Calculation/ArrayStats?Arr=[1,2,3,4,5,6]&Check=Num
Application name
Home
About
Contact
ArrayStats
Value: Array has 6 elements
© 2022 - My ASP.NET Application

```
0 references
public ActionResult Math()
{

    string strNumber1 = Request.QueryString["Number1"];
    string strNumber2 = Request.QueryString["Number2"];
    string strDo = Request.QueryString["Do"];


    if (String.Compare(strDo, "Addition", true) == 0)
    {
        int add = Convert.ToInt32(strNumber1) + Convert.ToInt32(strNumber2);
        return View((object)add.ToString());
    }

    else if (String.Compare(strDo, "Subtraction", true) == 0)
    {
        int sub = Convert.ToInt32(strNumber1) - Convert.ToInt32(strNumber2);
        return View((object)sub.ToString());
    }

    else if (String.Compare(strDo, "Multiplication", true) == 0)
    {
        int mul = Convert.ToInt32(strNumber1) * Convert.ToInt32(strNumber2);
        return View((object)mul.ToString());
    }

    else if (String.Compare(strDo, "Division", true) == 0)
    {
        int div = Convert.ToInt32(strNumber1) / Convert.ToInt32(strNumber2);
        return View((object)div.ToString());
    }

    return View((object)("Ohh"));
}

}
}
```




Math - My ASP.NET Application
https://localhost:44365/Calculation/Math?Number1=4&Number2=2&Do=Division
Application name
Home
About
Contact
Math
Value: 2
© 2022 - My ASP.NET Application


Math - My ASP.NET Application
https://localhost:44365/Calculation/Math?Number1=5&Number2=2&Do=Subtraction
Application name
Home
About
Contact
Math
Value: 3
© 2022 - My ASP.NET Application


Math - My ASP.NET Application
https://localhost:44365/Calculation/Math?Number1=5&Number2=2&Do=Multiplication
Application name
Home
About
Contact
Math
Value: 10
© 2022 - My ASP.NET Application

CalculationController.cs | RouteConfig.cs

Lab01_MVC | Lab01_MVC.RouteConfig | RegisterRoutes(

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.Mvc;
using System.Web.Routing;

namespace Lab01_MVC
{
    1 reference
    public class RouteConfig
    {
        1 reference
        public static void RegisterRoutes(RouteCollection routes)
        {
            routes.IgnoreRoute("{resource}.axd/{*pathInfo}");

            routes.MapRoute(
                name: "Calculation",
                url: "Calculation/{action}/{Message}",
                defaults: new { controller = "Calculation", action = "Index", Message = UrlParameter.Optional }
            );

            routes.MapRoute(
                name: "Calculations",
                url: "Calculation/{Message}",
                defaults: new { controller = "Calculation", action = "Math", Message = UrlParameter.Optional }
            );


            routes.MapRoute(
                name: "Default",
                url: "{controller}/{action}/{Message}",
                defaults: new { controller = "Calculation", action = "Index", Message = UrlParameter.Optional }
            );
        }
    }
}

```