**AIM: Design MVC based Web applications.**

**1. Create a MVC based Web Application to find the factors of number entered by the user. Create a View to take input from the user and display the answer.**

**CODE:**

**Index.cshtml :**

@{

ViewData["Title"] = "GCD Calculator";

}

<h2>@ViewData["Title"]</h2>

@using (Html.BeginForm("CalculateGCD", "GCD", FormMethod.Post))

{

<div>

<label>Number 1:</label>

<input type="number" id="number1" name="number1" required>

</div>

<div>

<label>Number 2:</label>

<input type="number" id="number2" name="number2" required>

</div>

<button type="submit">Calculate GCD</button>

}

@if (ViewBag.GCD != null)

{

<div role="alert">

GCD: @ViewBag.GCD

</div>

}

### GCDcontroller.cs :

using System;

using System.Collections.Generic; using System.Linq;

using System.Web; using System.Web.Mvc;

namespace GCD.Controllers

{

public class GCDController : Controller

{

// GET: GCD

public ActionResult Index()

{

return View();

}

[HttpPost]

public ActionResult CalculateGCD(int number1, int number2)

{

int gcd = CalculateGCD1(number1, number2); ViewBag.GCD = gcd;

return View("Index");

}

private int CalculateGCD1(int a, int b)

{

while (b != 0)

{

int temp = b; b = a % b;

a = temp;

}

return a;

}

}

}

**OUTPUT:**





