**SYED MUHAMMAD SARIB**

**233505**

**BSCS (A)**

**Visual Programming**

**ASSIGNMENT 1**

* **TASK 1: Write a program to enter and sum the values on  a diagonal of 3\*3\*3 matrix**

**Code:**

**using System;**

**class Program**

**{**

**static void Main(string[] args)**

**{**

**int[,,] array3d = new int[3, 3, 3];**

**for (int i = 0; i < 3; i++)**

**{**

**for (int j = 0; j < 3; j++)**

**{**

**for (int k = 0; k < 3; k++)**

**{**

**Console.Write($"Enter value at matrix[{i},{j},{k}]: ");**

**array3d[i, j, k] = int.Parse(Console.ReadLine());**

**}**

**}**

**}**

**//Functio to display diagonal**

**for (int i = 0; i < 3; i++)**

**{**

**Console.WriteLine("\nThis is dimention " + (i + 1));**

**for (int j = 0; j < 3; j++)**

**{**

**for (int k = 0; k < 3; k++)**

**{**

**Console.Write(array3d[i, j, k] + " ");**

**}**

**Console.WriteLine();**

**}**

**Console.WriteLine();**

**}**

**int result = 0;**

**//Sum of Diagonal**

**for (int i = 0; i < 3; i++)**

**{**

**result += array3d[i, i, i];**

**}**

**Console.WriteLine(" Sum of diagonal is : " + result);**

**}**

**}**

**Output:**

