

## Experiment No:5

Name: Vaishnavi Kumar Sutar

Class: TYCSE

Roll No: 54

Batch:T3

```
//Operator Overloading using
System; class
Student
{ public string Name { get; set;
  } public int MathMarks { get;
set;    }    public    int
ScienceMarks { get; set; } public int EnglishMarks { get; set; } public
Student(string name, int mathMarks, int scienceMarks, int englishMarks) {
    Name = name; MathMarks
    =
    mathMarks;
    ScienceMarks =
    scienceMarks;
    EnglishMarks =
    englishMarks;
} public static Student operator +(Student student1, Student student2)
{
    int combinedMathMarks = student1.MathMarks + student2.MathMarks;
    int    combinedScienceMarks    =    student1.ScienceMarks    +
    student2.ScienceMarks; int    combinedEnglishMarks    =
    student1.EnglishMarks + student2.EnglishMarks;
```

```

        return new Student(
            student1.Name + " & " +
            student2.Name, combinedMathMarks,
            combinedScienceMarks,
            combinedEnglishMarks !!!
        );
    }    public    void
Display()
    {
        Console.WriteLine($"Name: {Name}");
        Console.WriteLine($"Math           Marks:           {MathMarks}");
        Console.WriteLine($"Science Marks: {ScienceMarks}");
        Console.WriteLine($"English Marks:
        {EnglishMarks}");
        Console.WriteLine($"Total Marks: {MathMarks + ScienceMarks +
        -----
        EnglishMarks}"); Console.WriteLine(" ");
    }
}    class
Program
{ static void Main(string[] args)
    {
        Console.WriteLine("Enter details for Student 1:");
        Console.Write("Name:  ");    string  name1 = Console.ReadLine();
        Console.Write("Math Marks:
        "); int mathMarks1 =
        Convert.ToInt32(Console.ReadLine());
        Console.Write("Science Marks: "); int scienceMarks1 =
        Convert.ToInt32(Console.ReadLine());
        Console.Write("English Marks: "); int englishMarks1 =

```

```
Convert.ToInt32(Console.ReadLine());
```

```
Student student1 = new Student(name1, mathMarks1, scienceMarks1, englishMarks1);
```

```
Console.WriteLine("\nEnter details for Student 2:"); Console.Write("Name:
```

```
");    string  name2 = Console.ReadLine();
```

```
Console.Write("Math
```

```
Marks: ");
```

```

int mathMarks2 = Convert.ToInt32(Console.ReadLine());
Console.Write("Science Marks: "); int scienceMarks2 =
    Convert.ToInt32(Console.ReadLine()); Console.Write("English Marks:
"); int englishMarks2 = Convert.ToInt32(Console.ReadLine()); Student
student2 = new Student(name2, mathMarks2, scienceMarks2,
englishMarks2); Console.WriteLine("\nStudent 1 details:");
student1.Display(); Console.WriteLine("Student 2 details:");
student2.Display();

Student combinedStudent = student1 + student2;

Console.WriteLine("Combined Student details:"); combinedStudent.Display();
}
}

```

Output:

```

Math Marks: 98
Science Marks: 78
English Marks: 91

Student 1 details:
Name: john
Math Marks: 86
Science Marks: 55
English Marks: 49
Total Marks: 190
-----
Student 2 details:
Name: daisy
Math Marks: 98
Science Marks: 78
English Marks: 91
Total Marks: 267
-----
Combined Student details:
Name: john & daisy
Math Marks: 184
Science Marks: 133
English Marks: 140
Total Marks: 457
-----

```

```

//String manipulation using string and string builder using
System; class Program
{ static void Main()
    { string str1 = "Hello"; string str2
      = "World";
      string result = str1 + " " + str2;
      Console.WriteLine(result); string interpolated
      = $"{str1}
        {str2}";
      Console.WriteLine(interpolated
        ); string sub    =    result.Substring(0,    5);
      Console.WriteLine(sub); string replaced    = result.Replace("World",
        "C#");
      Console.WriteLine(replaced);

      string[] words = result.Split('
        ');
      Console.WriteLine(words[
        0]); string joined = string.Join("-",
        words);

      Console.WriteLine(joined);

      Console.WriteLine(result.ToUpper());
      Console.WriteLine(result.ToLower());
    }
}

```

```
string spaced = " Trim me ";  
Console.WriteLine(spaced.Trim());}}
```

Output:



```
Hello World  
Hello World  
Hello  
Hello C#  
Hello  
Hello-World  
HELLO WORLD  
hello world  
Trim me
```

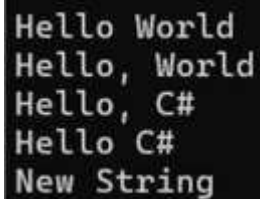
```
using System; using
```

```
System.Text; class
```

Program

```
{static void Main()  
{StringBuilder sb = new StringBuilder("Hello"); sb.Append(" World");  
Console.WriteLine(sb); sb.Insert(5, ","); Console.WriteLine(sb);  
sb.Replace("World", "C#"); Console.WriteLine(sb); sb.Remove(5, 1);  
Console.WriteLine(sb  
); sb.Clear();  
sb.Append("New  
String"Console.WriteLine(sb);}}
```

Output:



```
Hello World  
Hello, World  
Hello, C#  
Hello C#  
New String
```