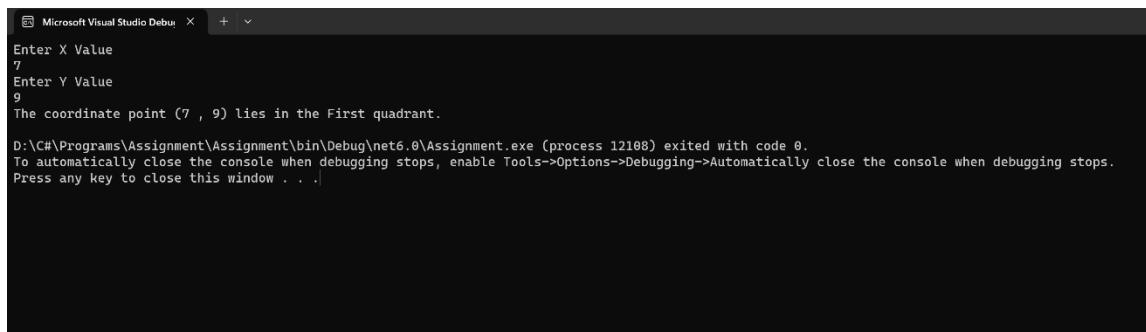


1. Write a C# Sharp program to accept a coordinate point in an XY coordinate system and determine in which quadrant the coordinate point lies.

```
class Soln
{
    public void coordinates(int x, int y)
    {
        if (x > 0 && y > 0)
        {
            Console.WriteLine("The coordinate point (" + x + " , " + y + ") lies in the First quadrant.");
        }
        else if (x < 0 && y > 0)
        {
            Console.WriteLine("The coordinate point (" + x + " , " + y + ") lies in the Second quadrant.");
        }
        else if (x < 0 && y < 0)
        {
            Console.WriteLine("The coordinate point (" + x + " , " + y + ") lies in the Third quadrant.");
        }
        else if (x > 0 && y < 0)
        {
            Console.WriteLine("The coordinate point (" + x + " , " + y + ") lies in the Fourth quadrant.");
        }
        else
        {
            Console.WriteLine("The coordinate point (" + x + " , " + y + ") lies in the Origin.");
        }
    }
}

// Driver Code

class Program
{
    public static void Main(string[] args)
    {
        int x, y;
        Console.WriteLine("Enter X Value");
        x = Convert.ToInt32(Console.ReadLine());
        Console.WriteLine("Enter Y Value");
        y = Convert.ToInt32(Console.ReadLine());
        Soln soln = new Soln();
        soln.coordinates(x,y);
    }
}
```



The screenshot shows the Microsoft Visual Studio Debug console window. It displays the following text:

```
Microsoft Visual Studio Debug X + ▾
Enter X Value
7
Enter Y Value
9
The coordinate point (7 , 9) lies in the First quadrant.

D:\C#\Programs\Assignment\Assignment\bin\Debug\net6.0\Assignment.exe (process 12108) exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```

2. Write a C# Sharp program to read roll no, name and marks of three subjects and calculate the total, percentage and division.

```
class Soln
```

```

{
    public void Student(int p_mark, int ch_mark, int cs_mark, double total_marks, double percentage,
string division)
    {
        total_marks = p_mark + ch_mark + cs_mark;
        Console.WriteLine("Total Marks = " + total_marks);
        percentage = total_marks / 3;
        string percent = percentage.ToString("0.00");
        Console.WriteLine("Percentage = " + percent);
        if (percentage >= 80)
        {
            division= "First";
            Console.WriteLine("Division = " + division);
        }
        else if ( percentage >=60 && percentage < 80)
        {
            division = "Second";
            Console.WriteLine("Division = " + division);
        }
        else
        {
            division = "Third";
            Console.WriteLine("Division = " + division);
        }
    }
}

// Driver Code

class Program
{
    public static void Main(string[] args)
    {

        Soln soln= new Soln();
        Console.WriteLine("Enter Roll No");
        int rollno = Convert.ToInt32(Console.ReadLine());
        Console.WriteLine("Enter Name of the Student");
        string stud_name = Console.ReadLine();
        Console.WriteLine("Enter Physics Mark");
        int p_mark = Convert.ToInt32(Console.ReadLine());
        Console.WriteLine("Enter Chemistry Mark");
        int ch_mark = Convert.ToInt32(Console.ReadLine());
        Console.WriteLine("Enter Computer Application Mark");
        int cs_mark = Convert.ToInt32(Console.ReadLine());
        double total_marks = 0;
        double percentage = 0;
        string division = null;
        Console.WriteLine("Roll No : " + rollno);
        Console.WriteLine("Name of Student : " + stud_name);
        Console.WriteLine("Marks in Physics : " + p_mark);
        Console.WriteLine("Marks in Chemistry : " + ch_mark);
        Console.WriteLine("Marks in Computer Application : " + cs_mark);
        soln.Student(p_mark, ch_mark, cs_mark, total_marks, percentage, division);
    }
}

```

```
Microsoft Visual Studio Debug X + ▾ - □ ×
5
6 Enter Roll No
7 784
8 Enter Name of the Student
9 James
10 Enter Physics Mark
11 70
12 Enter Chemistry Mark
13 80
14 Enter Computer Application Mark
15 90
16
17 Roll No : 784
18 Name of Student : James
19 Marks in Physics : 70
20 Marks in Chemistry : 80
21 Marks in Computer Application : 90
22 Total Marks = 240
23 Percentage = 80.00
24 Division = First
25
26 D:\C#\Programs\Assignment\Assignment\bin\Debug\net6.0\Assignment.exe (process 21152) exited with code 0.
27 To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the conso
28 le when debugging stops.
29
30 Press any key to close this window . . .
31
```

3. Write a program in C# Sharp to calculate and print the Electricity bill of a given customer. The customer id., name and unit consumed by the user should be taken from the keyboard and display the total amount to pay to the customer.

```
class Soln
{
    public void EB(int c_unit, int mincharge, double charge, double total_amt)
    {
        if (c_unit <= 199)
        {
            charge = 1.20;
            total_amt = c_unit * charge;
            if (total_amt > 400)
            {
                total_amt = (total_amt) + 15 / 100;
                Console.WriteLine("Total Bill : " + total_amt);
            }
            else if (total_amt < 100)
            {
                Console.WriteLine("Total Bill : " + mincharge);
            }
            else
            {
                Console.WriteLine("Total Bill : " + total_amt);
            }
        }
        else if (c_unit >= 200 && c_unit < 400)
        {
            charge = 1.50;
            total_amt = c_unit * charge;
            if (total_amt > 400)
            {
                total_amt = (total_amt) + 15 / 100;
                Console.WriteLine("Total Bill : " + total_amt);
            }
            else if (total_amt < 100)
            {
                Console.WriteLine("Total Bill : " + mincharge);
            }
            else
            {
                Console.WriteLine("Total Bill : " + total_amt);
            }
        }
        else if (c_unit >= 400 && c_unit < 600)
        {
            charge = 1.80;
            total_amt = c_unit * charge;
            if (total_amt > 400)
            {
                total_amt = (total_amt) + 15 / 100;
                Console.WriteLine("Total Bill : " + total_amt);
            }
            else if (total_amt < 100)
            {
```

```

        Console.WriteLine("Total Bill : " + mincharge);
    }
    else
    {
        Console.WriteLine("Total Bill : " + total_amt);
    }
}
else if (c_unit >= 600)
{
    charge = 2.00;
    total_amt = c_unit * charge;
    if (total_amt > 400)
    {
        total_amt = (total_amt) + 15 / 100;
        Console.WriteLine("Total Bill : " + total_amt);
    }
    else if (total_amt < 100)
    {
        Console.WriteLine("Total Bill : " + mincharge);
    }
    else
    {
        Console.WriteLine("Total Bill : " + total_amt);
    }
}
}

}

// Driver Code

class Program
{
    public static void Main(string[] args)
    {

        Soln soln= new Soln();
        Console.WriteLine(" Enter Customer ID");
        int cust_id = Convert.ToInt32(Console.ReadLine());
        Console.WriteLine("Enter Customer name");
        string cust_name =Console.ReadLine();
        Console.WriteLine("Enter Unit Consumed");
        int c_unit = Convert.ToInt32(Console.ReadLine());
        int mincharge = 100;
        double charge =0;
        double total_amt = 0;
        soln.EB(c_unit, mincharge, charge, total_amt);

    }
}

```

```

i  Enter Customer ID
{ 12
Enter Customer name
Vishal
Enter Unit Consumed
50
Total Bill : 100

```

```

D:\C#\Programs\Assignment\Assignment\bin\Debug\net6.0\Assignment.exe (process 8940) exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .

```

4.a) Write a program in C# Sharp to make such a pattern like right angle triangle with number increased by 1.

```
class Soln
{
    public void Pattern1(int total_no, int i, int j, int number)
    {
        for (i=1; i<=total_no; i++)
        {
            for ( j=1; j<=i; j++)
            {
                Console.Write(number);
                ++number;
            }
            Console.WriteLine("\n");
        }
    }
}

//Driver Code

class Program
{
    public static void Main(string[] args)
    {
        Soln soln= new Soln();
        Console.WriteLine("Enter the Total numbers of rows in a Triangle");
        int total_no = Convert.ToInt32(Console.ReadLine());
        int i =0;
        int j=0;
        int number = 1;
        soln.Pattern1(total_no, i, j, number);

    }
}
```

```
Enter the Total numbers of rows in a Triangle
4
1
23
456
78910

D:\C#\Programs\Assignment\Assignment\bin\Debug\net6.0\Assignment.exe (process 1280) exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```

4.b)

```
class Soln
{
    public void pattern2(int i , int j, int k, int rows,  int spc, int t)
    {
        spc = rows + 3;
        for (i = 1; i <= rows; i++)
        {
            for (k = spc; k >= 1; k--)
            {
                Console.Write(" ");
            }
            for (j = 1; j <= i; j++)
                Console.Write("{0} ", t++);
            Console.WriteLine("\n");
            spc--;
        }
    }
}
```

```

        }
    }
}

//Driver Code
class Program
{
    public static void Main(string[] args)
    {
        Soln soln = new Soln();
        int i = 0, j = 0, k = 0, spc = 0 ;
        int rows = 1, t = 1;
        Console.WriteLine("Enter the total number of rows in a triangle");
        rows = Convert.ToInt32(Console.ReadLine());
        soln.pattern2(i, j, k, rows, spc, t);
    }
}

Enter the total number of rows in a triangle
4
    1
   2 3
  4 5 6
 7 8 9 10

D:\C#\Programs\Assignment\Assignment\bin\Debug\net6.0\Assignment.exe (process 6392) exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .

```

5. Write a program in C# Sharp to

a. read n number of values in an array and display it in reverse order.

b. copy the elements one array into another array

c. find the sum of all elements of the array

d. count a total number of duplicate elements in an array.

e. print all unique elements in an array

f. find the second largest element in an array

```

class Soln
{
    public void Array(int i, int n)
    {
        //Reverse an array
        int[] arr1 = new int[10];
        Console.Write("Input number of elements in the array :\n", n);
        for (i = 0; i < n; i++)
        {
            Console.Write("element - {0} : ", i);
            arr1[i] = Convert.ToInt32(Console.ReadLine());
        }
        Console.Write("\n\nThe values store into the array in reverse are :\n");
        for (i = n - 1; i >= 0; i--)
        {
            Console.Write("{0} ", arr1[i]);
            Console.Write("\n");
        }
        //Duplicate Array
        int[] arr2 = new int[10];
        for (i = 0; i < n; i++)
        {
            arr2[i] = arr1[i];
        }
        Console.WriteLine("The copied values of arr1 into arr2");
        for (i = 0; i < n; i++)
    }
}

```

```

{
    Console.WriteLine("{0} ", arr2[i]);
}
//sum of elements in an array
int sum = 0;
for (i = 0; i < n; i++)
{
    sum += arr1[i];
}

Console.WriteLine("Sum of all elements stored in the array is : {0}", sum);
//count total no of duplicate elements in an array
int[] arr3 = new int[10];
int mm = 1, ctr = 0, j;
for (i = 0; i < n; i++)
{
    for (j = 0; j < n; j++)
    {
        if (arr1[i] == arr2[j])
        {
            arr3[j] = mm;
            mm++;
        }
    }
    mm = 1;
}
for (i = 0; i < n; i++)
{
    if (arr3[i] == 2) { ctr++; }
}
Console.Write("The number of duplicate elements is: {0} \n", ctr);
//unique numbers in an array
int k;
Console.Write("\nThe unique elements found in the array are : ");
for (i = 0; i < n; i++)
{
    ctr = 0;
    for (j = 0; j < i - 1; j++)
    {
        if (arr2[i] == arr2[j])
        {
            ctr++;
        }
    }
    for (k = i + 1; k < n; k++)
    {
        if (arr2[i] == arr2[k])
        {
            ctr++;
        }
        if (arr2[i] == arr2[i + 1])
        {
            i++;
        }
    }
}

if (ctr == 0)
{
    Console.WriteLine("{0} \n", arr2[i]);
}
}
//second largest number in an array
int lrg1, lrg2;

```

```

lrg1 = 0;
j = 0;

for (i = 0; i < n; i++)
{
    if (lrg1 < arr2[i])
    {
        lrg1 = arr2[i];
        j = i;
    }
}
lrg2 = 0;
for (i = 0; i < n; i++)
{
    if (i == j)
    {
        i++; /* ignoring the largest element */
        i--;
    }
    else
    {
        if (lrg2 < arr2[i])
        {
            lrg2 = arr2[i];
        }
    }
}

Console.WriteLine("The Second largest element in the array is : {0} ", lrg2);
}
}
//Driver Code
class Program
{
    public static void Main(string[] args)
    {

        Soln soln= new Soln();
        int i = 0, n=0;
        Console.Write("Input the number of elements to store in the array :");
        n = Convert.ToInt32(Console.ReadLine());
        soln.Array(i, n);
    }
}
Input the number of elements to store in the array :3
Input number of elements in the array :
element - 0 : 1
element - 1 : 2
element - 2 : 1

The values store into the array in reverse are :
1
2
1
The copied values of arr1 into arr2
1
2
1
Sum of all elements stored in the array is : 4
The number of duplicate elements is: 1

The unique elements found in the array are : 2
The Second largest element in the array is : 1
D:\C#\Programs\Assignment\Assignment\bin\Debug\net6.0\Assignment.exe (process 23944) exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .

```

6. Write a program in C# Sharp to find transpose of a given matrix.

```

class Soln
{
    public void matrix(int r, int c)
    {
        int[,] arr1 = new int[30, 30];
        Console.WriteLine("Enter a array elements:");
        for (int i = 0; i < r; i++)
        {
            for (int j = 0; j < c; j++)
            {
                arr1[i, j] = Convert.ToInt32(Console.ReadLine());
            }
        }

        Console.WriteLine("transpose Matrix is:");

        for (int i = 0; i < r; i++)
        {
            for (int j = 0; j < c; j++)
            {
                Console.Write(arr1[j, i] + " ");
            }
            Console.WriteLine(" ");
        }
    }
}

//Driver Code
class Program
{
    public static void Main(string[] args)
    {

        Soln soln= new Soln();
        int i, j, r, c;
        int[,] arr1 = new int[50, 50];
        int[,] brr1 = new int[50, 50];
        Console.Write("Rows : ");
        r = Convert.ToInt32(Console.ReadLine());
        Console.Write("Columns : ");
        c = Convert.ToInt32(Console.ReadLine());
        soln.matrix(r, c);
    }
}

```

279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298

```

Microsoft Visual Studio Debug x + v
Rows : 2
Columns : 2
Enter a array elements:
1
2
3
4
transpose Matrix is:
1 3
2 4
D:\C#\Programs\Assignment\Assignment\bin\Debug\net6.0\Assignment.exe (process 6060) exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .

```

8. Write a program in C# Sharp to count the total number of words in a string.

```

class Soln
{
    public void Alph(string str, int i, int wrd, int l)
    {
        l = 0;
        wrd = 1;
        while (l <= str.Length - 1)
        {
            if (str[l] == ' ' || str[l] == '\n' || str[l] == '\t')
            {
                wrd++;
            }
            l++;
        }
        Console.WriteLine("Total number of words in the string is : {0}\n", wrd);
    }
}
//Driver Code
class Program
{
    public static void Main(string[] args)
    {
        Soln soln= new Soln();
        string str;
        int i=0, wrd=0, l = 0;
        Console.Write("Input the string : ");
        str = Console.ReadLine();
        soln.Alph(str, i, wrd, l);

    }
}

```

Microsoft Visual Studio Debug + ▾

f Input the string : vishal bharath kumar
Total number of words in the string is : 3
D:\C#\Programs\Assignment\Assignment\bin\Debug\net6.0\Assignment.exe (process 20828) exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
} Press any key to close this window . . .

9. Write a program in C# Sharp to count a total number of alphabets, digits and special characters in a string.

```

class Soln
{
    public void StringCount(string psw)
    {
        int alphaCount = 0;
        int numCount = 0;
        int splCount = 0;

        for (int i = 0; i < psw.Length; i++)
        {
            if ((psw[i] >= 'a' && psw[i] <= 'z') || (psw[i] >= 'A' && psw[i] <= 'Z'))
            {
                alphaCount++;
            }
        }
    }
}

```

```

        else if (psw[i] >= '0' && psw[i] <= '9')
    {
        numCount++;
    }
    else
    {
        splCount++;
    }
}
Console.WriteLine("Alphabets count in a string is: " + alphaCount);
Console.WriteLine("Numbers count in a string is: " + numCount);
Console.WriteLine("Special characters count in a string is: " + splCount);
}
}
//Driver Code

class Program
{
    public static void Main(string[] args)
    {
        Soln soln= new Soln();
        string psw;
        Console.WriteLine("Enter a String : ");
        psw= Console.ReadLine();
        soln.StringCount(psw);

    }
}

```

```

Microsoft Visual Studio Debug x + v

Enter a String :
vishal@04
Alphabets count in a string is: 6
Numbers count in a string is: 2
Special characters count in a string is: 1

D:\C#\Programs\Assignment\Assignment\bin\Debug\net6.0\Assignment.exe (process 21212) exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .

```

10. Write a C# Sharp program to find the middle character(s) of a given string. Return the middle character if the length of the string is odd and return two middle characters if the length of the string is even.

```

class Soln
{
    public void Stringtxt(string txt)
    {
        string x;
        int l = 1 - txt.Length % 2;
        x=txt.Substring(txt.Length / 2 - l, 1 + l);
        Console.WriteLine(x);

    }
}
//Driver Code

class Program
{
    public static void Main(string[] args)
    {
        Soln soln = new Soln();
        string txt;
        Console.Write("Input the string : ");

```

```

        txt= Console.ReadLine();
        soln.Stringtxt(txt);

    }
}

```

```

Microsoft Visual Studio Debug X + v

Input the string : vishal
sh

D:\C#\Programs\Assignment\Assignment\bin\Debug\net6.0\Assignment.exe (process 3528) exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .

```

11. Write a program in C# Sharp to create a function to display the n number Fibonacci sequence.

```

class Soln
{
    public void fibb(int num1,int num2, int n)
    {
        for (int i = 3; i <=n; ++i)
        {
            Console.Write(num2);
            int temp = num1;
            num1 = num2;
            num2 = temp + num1;
        }
    }
}
// Driver Code

```

```

class Program
{
    public static void Main(string[] args)
    {
        Soln soln= new Soln();
        Console.Write("Input number of Fibonacci Series : ");
        int n = Convert.ToInt32(Console.ReadLine());
        int num1 = 0;
        int num2 = 1;
        Console.Write(num1);
        Console.Write(num2);
        soln.fibb(n,num1, num2);

    }
}

```

```

Microsoft Visual Studio Debug X + v

Input number of Fibonacci Series : 2
01
D:\C#\Programs\Assignment\Assignment\bin\Debug\net6.0\Assignment.exe (process 11544) exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .

```

12. Write a program in C# Sharp to create a function to check if a given number is Armstrong number or not

```

class Soln
{
    public void arms(int temp, int num, int r, int sum)
    {

```

```

        for (temp = num; num != 0; num = num / 10)
        {
            r = num % 10;
            sum = sum + (r * r * r);
        }
        if (sum == temp)
            Console.WriteLine("{0} is an Armstrong number.\n", temp);
        else
            Console.WriteLine("{0} is not an Armstrong number.\n", temp);
    }
}
//Driver Code
class Program
{
    public static void Main(string[] args)
    {
        Soln soln= new Soln();
        int num, r=0, sum = 0, temp=0;
        Console.Write("Input a number: ");
        num = Convert.ToInt32(Console.ReadLine());
        soln.arms(temp, num, r, sum);

    }
}
36 Input a number: 153
36 153 is an Armstrong number.
36
36 D:\C#\Programs\Assignment\Assignment\bin\Debug\net6.0\Assignment.exe (process 8292) exited with code 0.
36 To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the conso
36 le when debugging stops.
36 Press any key to close this window . . .
36
37
37

```

13. Write a program in C# Sharp to create a function to check if a given number is Perfect number or Not

```

class Soln
{
    public void perfect(int i, int n, int sum)
    {
        for (i = 1; i < n; i++)
        {
            if (n % i == 0)
            {
                sum = sum + i;
                Console.WriteLine("{0} ", i);
            }
        }
        Console.WriteLine("\nThe sum of the divisor is : {0}", sum);
        if (sum == n)
            Console.WriteLine("\nSo, the number is perfect.");
        else
            Console.WriteLine("\nSo, the number is not perfect.");
    }
}
//Driver Code
class Program
{
    Soln soln= new Soln();
    int n, i=0, sum=0;
    Console.Write("Input the number : ");
    n = Convert.ToInt32(Console.ReadLine());
    soln.perfect(n,i,sum);
}

```

```
    }  
}
```

```
Input the number : 45  
The sum of the divisor is : 0  
So, the number is perfect.  
D:\C#\Programs\Assignment\Assignment\bin\Debug\net6.0\Assignment.exe (process 10672) exited with code 0.  
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.  
Press any key to close this window . . .
```

14. Write a program in C# Sharp to create a function to check if a given number is Prime number or Not

```
class Soln
```

```
{  
    public void prime(int n)  
    {  
        int flag = 0;  
        for (int i = 2; i < n/2; i++)  
        {  
            if(n%i== 0)  
            {  
                flag++;  
                break;  
            }  
        }  
        if (flag == 0)  
        {  
            Console.WriteLine(n + " is a prime number");  
        }  
        else  
        {  
            Console.WriteLine(n + " is not a prime number");  
        }  
    }  
}
```

```
//Driver Code
```

```
class Program
```

```
{  
    Soln soln= new Soln();  
    Console.Write("Input a number : ");  
    int n = Convert.ToInt32(Console.ReadLine());  
    soln.prime(n);  
}
```

```
Microsoft Visual Studio Debug X + ▾  
Input a number : 7  
7 is a prime number  
D:\C#\Programs\Assignment\Assignment\bin\Debug\net6.0\Assignment.exe (process 13940) exited with code 0.  
Press any key to close this window . . .
```

7. Write a C# Sharp program that calculates the sum of all prime numbers in an array of numbers

```
class Soln
{
    public int primenumber(int count)
    {
        int[] arr = new int[10];
        int[] parr = new int[10];
        int SumofPrime = 0;

        Console.WriteLine("Enter a Elements: ");
        for (int i = 0; i < count; i++)
        {
            arr[i] = Convert.ToInt32(Console.ReadLine());
        }

        for (int i = 0; i < count; i++)
        {
            int flag = 1;

            for (int j = 2; j <= arr[i] / 2; j++)
            {

                if (arr[i] % j == 0)
                {

                    flag = 0;
                    break;
                }
            }

            if (flag != 0)
            {

                SumofPrime += arr[i];
            }
        }
        Console.WriteLine("Sum of prime numbers is " + SumofPrime);
    }

    return SumofPrime;
}

//Driver Code
class Program
{
    Soln soln = new Soln();
    int element;
    Console.WriteLine("enter a array Length:");
    element = Convert.ToInt32(Console.ReadLine());
    PrimenuumberSum primenumberSum = new PrimenuumberSum();
    soln.primenumber(element);
}
```

```

enter a array Length:
3
Enter a Elements:
11
12
13
Sum of prime numbers is 24

D:\c#\programs\assessment\assessment\bin\Debug\net6.0\assessment.exe (process 23532) exited with code 0.
Press any key to close this window . . .

```

15. Write a program in C# Sharp to
- create a function to check if a given string is Palindrome or not
 - create a function to check if a given number is Palindrome or not

```

class Soln
{
    public void palindrome(string s, string revs)
    {
        for (int i = s.Length - 1; i >= 0; i--) //String Reverse
        {
            revs += s[i].ToString();
        }
        if (revs == s) // Checking whether string is palindrome or not
        {
            Console.WriteLine("String is Palindrome \n Entered String Was {0} and reverse string is {1}", s,
revs);
        }
        else
        {
            Console.WriteLine("String is not Palindrome \n Entered String Was {0} and reverse string is {1}",
s, revs);
        }
    }
}

//Driver Code
class Program
{
    Soln soln= new Soln();
    string s, revs = "";
    Console.WriteLine(" Enter string");
    s = Console.ReadLine();
    soln.palindrome(s,revs);

}
}

```

```

Enter string
malayalam
String is Palindrome
Entered String Was malayalam and reverse string is malayalam

D:\C#\Programs\Assignment\Assignment\bin\Debug\net6.0\Assignment.exe (process 11724) exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the conso
le when debugging stops.
Press any key to close this window . . .

```

```

b) class Soln
{
    public void palindrome(int num, int sum)
    {
        int t, r;
        for (t = num; num != 0; num = num / 10)
        {
            r = num % 10;
            sum = sum * 10 + r;
        }
        if (t == sum)
            Console.WriteLine("{0} is a palindrome number.\n", t);
        else
            Console.WriteLine("{0} is not a palindrome number.\n", t);
    }
}

//Driver Code
class Program
{
    Soln soln= new Soln();
    int num, sum = 0;
    Console.Write("Input a number: ");
    num = Convert.ToInt32(Console.ReadLine());
    soln.palindrome(num,sum);

}
}

```

```

111 Microsoft Visual Studio Debug X +
112
113 Input a number: 76567
114 76567 is a palindrome number.
115
116 D:\C#\Programs\Assignment\Assignment\bin\Debug\net6.0\Assignment.exe (process 5484) exited with code 0.
117 To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the conso
118 le when debugging stops.
119
120 Press any key to close this window . . .
121
122
123

```