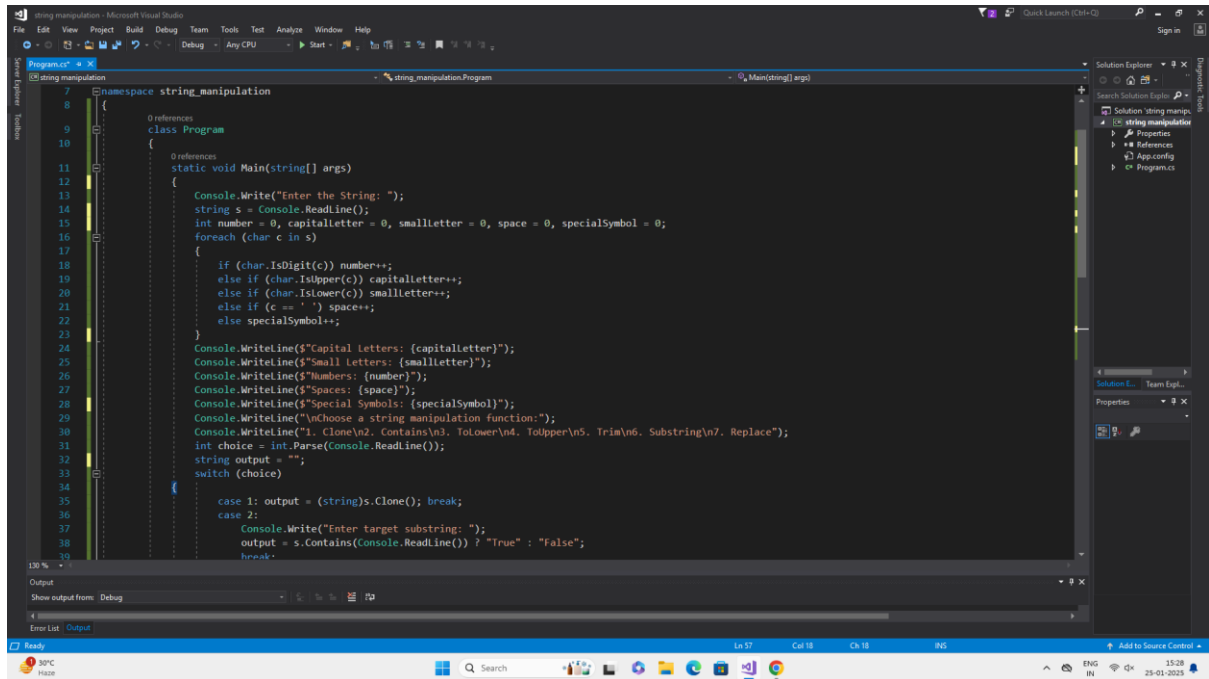
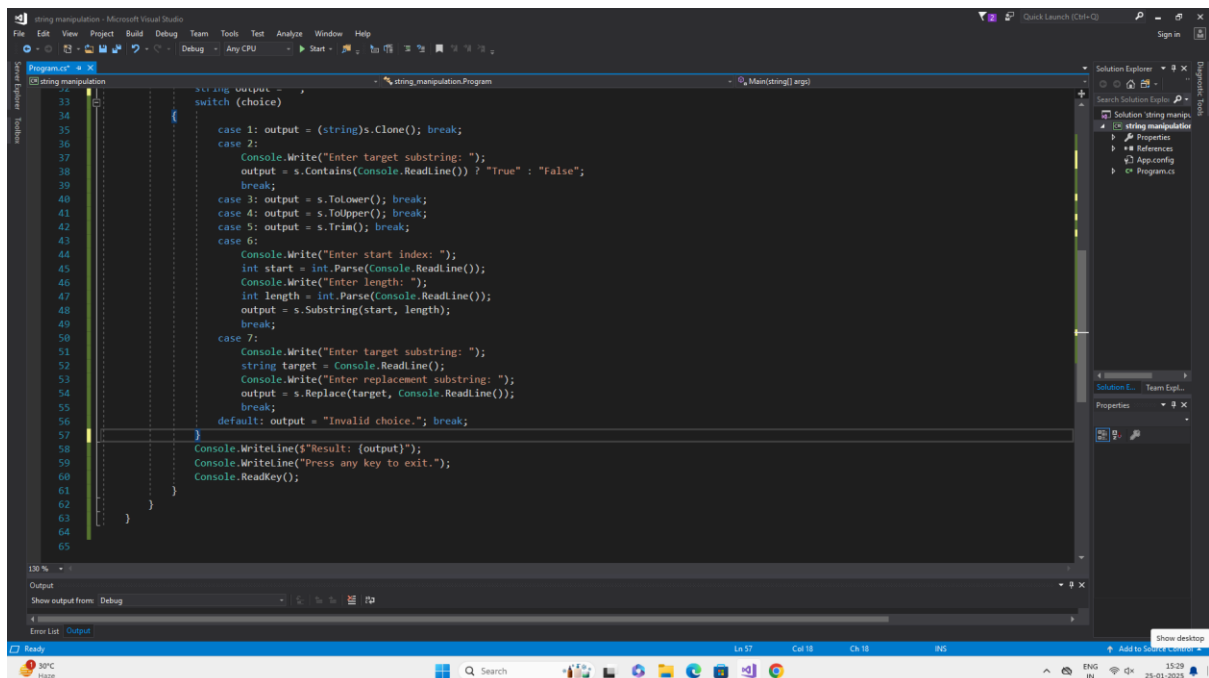


STRING OPERATIONS



This screenshot shows the first part of a C# program in Visual Studio. The code defines a namespace `string_manipulation` and a class `Program` with a `Main` method. The `Main` method prompts the user to enter a string and then counts the number of digits, capital letters, small letters, spaces, and special symbols in the string. It also displays the counts for each category.

```
7 namespace string_manipulation
8 {
9     class Program
10     {
11         static void Main(string[] args)
12         {
13             Console.WriteLine("Enter the String: ");
14             string s = Console.ReadLine();
15             int number = 0, capitalLetter = 0, smallLetter = 0, space = 0, specialSymbol = 0;
16             foreach (char c in s)
17             {
18                 if (char.IsDigit(c)) number++;
19                 else if (char.IsUpper(c)) capitalLetter++;
20                 else if (char.IsLower(c)) smallLetter++;
21                 else if (c == ' ') space++;
22                 else specialSymbol++;
23             }
24             Console.WriteLine($"Capital Letters: {capitalLetter}");
25             Console.WriteLine($"Small Letters: {smallLetter}");
26             Console.WriteLine($"Numbers: {number}");
27             Console.WriteLine($"Spaces: {space}");
28             Console.WriteLine($"Special Symbols: {specialSymbol}");
29             Console.WriteLine("\nChoose a string manipulation function:");
30             Console.WriteLine("1. Clone\n2. Contains\n3. ToLower\n4. ToUpper\n5. Trim\n6. Substring\n7. Replace");
31             int choice = int.Parse(Console.ReadLine());
32             string output = "";
33             switch (choice)
34             {
35                 case 1: output = (string)s.Clone(); break;
36                 case 2:
37                     Console.WriteLine("Enter target substring: ");
38                     output = s.Contains(Console.ReadLine()) ? "True" : "False";
39                     break;
40             }
41         }
42     }
43 }
```



This screenshot shows the second part of the C# program in Visual Studio. The code continues the `switch` statement from the previous screenshot, adding cases for `ToLower`, `ToUpper`, `Trim`, `Substring`, and `Replace`. It also includes a `default` case for invalid choices. The program then displays the result of the chosen operation and prompts the user to press any key to exit.

```
33             switch (choice)
34             {
35                 case 1: output = (string)s.Clone(); break;
36                 case 2:
37                     Console.WriteLine("Enter target substring: ");
38                     output = s.Contains(Console.ReadLine()) ? "True" : "False";
39                     break;
40                 case 3: output = s.ToLower(); break;
41                 case 4: output = s.ToUpper(); break;
42                 case 5: output = s.Trim(); break;
43                 case 6:
44                     Console.WriteLine("Enter start index: ");
45                     int start = int.Parse(Console.ReadLine());
46                     Console.WriteLine("Enter length: ");
47                     int length = int.Parse(Console.ReadLine());
48                     output = s.Substring(start, length);
49                     break;
50                 case 7:
51                     Console.WriteLine("Enter target substring: ");
52                     string target = Console.ReadLine();
53                     Console.WriteLine("Enter replacement substring: ");
54                     output = s.Replace(target, Console.ReadLine());
55                     break;
56                 default: output = "Invalid choice."; break;
57             }
58             Console.WriteLine($"Result: {output}");
59             Console.WriteLine("Press any key to exit.");
60             Console.ReadKey();
61         }
62     }
63 }
```

```
c:\users\3bsccsa65\source\rej X + v
Enter the String: MughilarasiSemhottuvel@2004
Capital Letters: 2
Small Letters: 20
Numbers: 4
Spaces: 0
Special Symbols: 1

Choose a string manipulation function:
1. Clone
2. Contains
3. ToLower
4. ToUpper
5. Trim
6. Substring
7. Replace
1
Result: MughilarasiSemhottuvel@2004
Press any key to exit.
|
```

```
c:\users\3bsccsa65\source\rej X + v
Enter the String: MughilarasiSengottuvel @2004
Capital Letters: 2
Small Letters: 20
Numbers: 4
Spaces: 1
Special Symbols: 1

Choose a string manipulation function:
1. Clone
2. Contains
3. ToLower
4. ToUpper
5. Trim
6. Substring
7. Replace
2
Enter target substring: g
Result: True
Press any key to exit.
|
```

```
c:\users\3bsccsa65\source\rej X + v
Enter the String: MughilarasiSengottuvel @2004
Capital Letters: 2
Small Letters: 20
Numbers: 4
Spaces: 1
Special Symbols: 1

Choose a string manipulation function:
1. Clone
2. Contains
3. ToLower
4. ToUpper
5. Trim
6. Substring
7. Replace
3
Result: mughilarasisengottuvel @2004
Press any key to exit.
|
```

```
c:\users\3bsccsa65\source\rej X + v
Enter the String: MughilarasiSengottuvel @2004
Capital Letters: 2
Small Letters: 20
Numbers: 4
Spaces: 2
Special Symbols: 1

Choose a string manipulation function:
1. Clone
2. Contains
3. ToLower
4. ToUpper
5. Trim
6. Substring
7. Replace
4
Result: MUGHILARASISENGOTTUVEL @2004
Press any key to exit.
|
```

```
c:\users\3bsccsa65\source\rej X + v
Enter the String: hello mughilarasi @65
Capital Letters: 0
Small Letters: 16
Numbers: 2
Spaces: 2
Special Symbols: 1

Choose a string manipulation function:
1. Clone
2. Contains
3. ToLower
4. ToUpper
5. Trim
6. Substring
7. Replace
5
Result: hello mughilarasi @65
Press any key to exit.
|
```

```
c:\users\3bsccsa65\source\rej X + v
Enter the String: .NET programming
Capital Letters: 3
Small Letters: 11
Numbers: 0
Spaces: 1
Special Symbols: 1

Choose a string manipulation function:
1. Clone
2. Contains
3. ToLower
4. ToUpper
5. Trim
6. Substring
7. Replace
6
Enter start index: 2
Enter length: 3
Result: ET
Press any key to exit.
|
```

c:\users\3bsccsa65\source\rej X + v

Enter the String: krishnammal college for women 001

Capital Letters: 0

Small Letters: 26

Numbers: 3

Spaces: 4

Special Symbols: 0

Choose a string manipulation function:

1. Clone
 2. Contains
 3. ToLower
 4. ToUpper
 5. Trim
 6. Substring
 7. Replace
- 7

Enter target substring: 001

Enter replacement substring: coimbatore

Result: krishnammal college for women coimbatore

Press any key to exit.

|