**C# Properties**

C# Properites doesn't have storage location. C# Properites are extension of fields and accessed like fields.

The Properties have accessors that are used to set, get or compute their values.

**Usage of C# Properties**

1. C# Properties can be read-only or write-only.
2. We can have logic while setting values in the C# Properties.
3. We make fields of the class private, so that fields can't be accessed from outside the class directly. Now we are forced to use C# properties for setting or getting values.

**C# Properties Example**

1. using System;
2. public class Employee
3. {
4. private string name;
6. public string Name
7. {
8. get
9. {
10. return name;
11. }
12. set
13. {
14. name = value;
15. }
16. }
17. }
18. class TestEmployee{
19. public static void Main(string[] args)
20. {
21. Employee e1 = new Employee();
22. e1.Name = "Sonoo Jaiswal";
23. Console.WriteLine("Employee Name: " + e1.Name);
25. }
26. }

Output:

Employee Name: Sonoo Jaiswal

**C# Properties Example 2: having logic while setting value**

1. using System;
2. public class Employee
3. {
4. private string name;
6. public string Name
7. {
8. get
9. {
10. return name;
11. }
12. set
13. {
14. name = value+" JavaTpoint";
16. }
17. }
18. }
19. class TestEmployee{
20. public static void Main(string[] args)
21. {
22. Employee e1 = new Employee();
23. e1.Name = "Sonoo";
24. Console.WriteLine("Employee Name: " + e1.Name);
25. }
26. }

Output:

Employee Name: Sonoo JavaTpoint

**C# Properties Example 3: read-only property**

1. using System;
2. public class Employee
3. {
4. private static int counter;
6. public Employee()
7. {
8. counter++;
9. }
10. public static int Counter
11. {
12. get
13. {
14. return counter;
15. }
16. }
17. }
18. class TestEmployee{
19. public static void Main(string[] args)
20. {
21. Employee e1 = new Employee();
22. Employee e2 = new Employee();
23. Employee e3 = new Employee();
24. //e1.Counter = 10;//Compile Time Error: Can't set value
26. Console.WriteLine("No. of Employees: " + Employee.Counter);
27. }
28. }

Output:

No. of Employees: 3