**C# Structs**

In C#, classes and structs are blueprints that are used to create instance of a class. Structs are used for lightweight objects such as Color, Rectangle, Point etc.

Unlike class, structs in C# are value type than reference type. It is useful if you have data that is not intended to be modified after creation of struct.

**C# Struct Example**

Let's see a simple example of struct Rectangle which has two data members width and height.

1. using System;
2. public struct Rectangle
3. {
4. public int width, height;
6. }
7. public class TestStructs
8. {
9. public static void Main()
10. {
11. Rectangle r = new Rectangle();
12. r.width = 4;
13. r.height = 5;
14. Console.WriteLine("Area of Rectangle is: " + (r.width \* r.height));
15. }
16. }

Output:

Area of Rectangle is: 20

**C# Struct Example: Using Constructor and Method**

Let's see another example of struct where we are using constructor to initialize data and method to calculate area of rectangle.

1. using System;
2. public struct Rectangle
3. {
4. public int width, height;
6. public Rectangle(int w, int h)
7. {
8. width = w;
9. height = h;
10. }
11. public void areaOfRectangle() {
12. Console.WriteLine("Area of Rectangle is: "+(width\*height)); }
13. }
14. public class TestStructs
15. {
16. public static void Main()
17. {
18. Rectangle r = new Rectangle(5, 6);
19. r.areaOfRectangle();
20. }
21. }

Output:

Area of Rectangle is: 30