

```
1 using System;
2 using System.Data.SqlTypes;
3 using Microsoft.SqlServer.Server;
4
5 namespace CLRUDT_Types
6 {
7     [Microsoft.SqlServer.Server.SqlUserDefinedType(Format.Native,
8         IsByteOrdered = true)]
9     public struct PointType : INullable
10    {
11        public bool IsNull { get; private set; }
12
13        public static PointType Null
14        {
15            get
16            {
17                PointType point = new PointType
18                {
19                    IsNull = true
20                };
21                return point;
22            }
23        }
24
25        public int X
26        {
27            get; set;
28        }
29
30        public int Y
31        {
32            get; set;
33        }
34
35        public override string ToString()
36        {
37            return $"{X}:{Y}";
38        }
39
40        [SqlMethod(OnNullCall = false)]
41        public static PointType Parse(SqlString s)
42        {
43            if (s.IsNull)
44            {
45                return Null;
46            }
47
48            string[] parts = s.ToString().Split(':');
49            if (parts.Length < 2 || !IsInteger(parts[0]) || !IsInteger(parts
```

```
        [1]))
50     {
51         return Null;
52     }
53     PointType pt = new PointType
54     {
55         IsNull = false,
56         X = int.Parse(parts[0]),
57         Y = int.Parse(parts[1])
58     };
59     return pt;
60 }
61
62 public static bool IsInteger(string s)
63 {
64     if (s.Equals(null))
65     {
66         return false;
67     }
68     try
69     {
70         int.Parse(s);
71         return true;
72     }
73     catch (Exception)
74     {
75         return false;
76     }
77 }
78 }
79 }
80
```