```
 1  using System;
 2  using System.Collections.Generic;
 3  using System.Linq;
 4  using System.Text;
 5  using System.Threading.Tasks;
 6  using System.ComponentModel;
 7  using System.Windows.Forms;
 8
 9
10
11  namespace knapsackplanner
12  {
13      class Container
14      {
15
16          //######################################
17          //INSTANCE VARIABLES
18          private string _name;
19          private double _maxWeight;
20          private double _maxVolume;
21          private double _totalWeight;
22          private double _totalVolume;
23          private BindingList<Item> _itemsContained = new BindingList<Item>();
24
25          public Container(string name, double maxWeight, double maxVolume)
26          {
27              _name = name;
28              _maxWeight = maxWeight;
29              _maxVolume = maxVolume;
30          }
31
32
33
34          public string Name
35          {
36              get { return _name; }
37              set { _name = value; }
38          }
39          public double MaxWeight
40          {
41              get { return _maxWeight; }
42              set { _maxWeight = value; }
43          }
44          public double MaxVolume
45          {
46              get { return _maxVolume; }
47              set { _maxVolume = value; }
48          }
49          public double TotalWeight
50          {
51              get { return _totalWeight; }
52          }
53          public double TotalVolume
54          {
55              get { return _totalVolume; }
56          }
```

```csharp
57          public BindingList<Item> ItemsContained
58          {
59              get { return _itemsContained; }
60              set { _itemsContained = value; }
61          }
62          public void Bind(DataGridView grid)
63          {
64              grid.DataSource = _itemsContained;
65          }
66          public void Update()
67          {
68              _totalWeight = 0;
69              _totalVolume = 0;
70              foreach (Item item in _itemsContained)
71              {
72                  _totalWeight += item.Weight;
73                  _totalVolume += item.Volume;
74              }
75          }
76      }
77  }
78
```