

Prompt	Scratchpad	Our Solution(s)	Video Explanation	Run Code	Your Solutions	Run Code
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Solution 1Solution 2

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 using System.Collections.Generic;
4
5 public class Program {
6     // O(n*2^n) time | O(n*2^n) space
7     public static List<List<int> > Powerset(List<int> array) {
8         return Powerset(array, array.Count - 1);
9     }
10
11     public static List<List<int> > Powerset(List<int> array, int idx) {
12         if (idx < 0) {
13             List<List<int> > emptySet = new List<List<int> >();
14             emptySet.Add(new List<int>());
15             return emptySet;
16         }
17         int ele = array[idx];
18         List<List<int> > subsets = Powerset(array, idx - 1);
19         int length = subsets.Count;
20         for (int i = 0; i < length; i++) {
21             List<int> currentSubset = new List<int>(subsets[i]);
22             currentSubset.Add(ele);
23             subsets.Add(currentSubset);
24         }
25         return subsets;
26     }
27 }
28
```

Solution 1Solution 2Solution 3

```
1 using System.Collections.Generic;
2
3 public class Program {
4     public static List<List<int> > Powerset(List<int> array) {
5         // Write your code here.
6         return null;
7     }
8 }
9
```

Run or submit code when you're ready.