

PromptScratchpadOur Solution(s)Video Explanation

Run Code

Solution 1Solution 2

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 package main
4
5 type LinkedList struct {
6     Value int
7     Next *LinkedList
8 }
9
10 // O(n + m) time | O(1) space - where n is the number of nodes in the first
11 // Linked List and m is the number of nodes in the second Linked List
12 func MergeLinkedLists(headOne *LinkedList, headTwo *LinkedList) *LinkedList {
13     p1 := headOne
14     var p1Prev *LinkedList
15     p2 := headTwo
16     for p1 != nil && p2 != nil {
17         if p1.Value < p2.Value {
18             p1Prev = p1
19             p1 = p1.Next
20         } else {
21             if p1Prev != nil {
22                 p1Prev.Next = p2
23             }
24             p1Prev = p2
25             p2 = p2.Next
26             p1Prev.Next = p1
27         }
28     }
29
30     if p1 == nil {
31         p1Prev.Next = p2
32     }
33
34     if headOne.Value < headTwo.Value {
35         return headOne
36     }
37     return headTwo
38 }
39
```