

</> Code

Python3 Auto

```

1 class Solution:
2     def constructRectangle(self, area: int) -> List[int]:
3         # initialize width and length with square root of target area rounded down and up, respectively
4         width = int(math.sqrt(area))
5         length = int(math.ceil(area / width))
6
7         # loop until width and length multiplied is equal to target area
8         while width * length != area:
9             # if width * length is less than target area, increment length
10            if width * length < area:
11                length += 1
12            # if width * length is greater than target area, decrement width
13            else:
14                width -= 1
15
16        # return [length, width]
17        return [length, width]
18
    
```


</> Code

Python3 ▾ 🔒 Auto

```
1 class Solution:
2     def judgeCircle(self, moves: str) -> bool:
3         lr, ud = 0, 0
4
5         for move in moves:
6             if move == 'U':
7                 ud += 1
8             elif move == 'D':
9                 ud -= 1
10            elif move == 'L':
11                lr += 1
12            elif move == 'R':
13                lr -= 1
14
15        if lr == 0 and ud == 0:
16            return True
```


leetcode.com/problems/pascals-triangle/

Pascal's Triangle - LeetCode
leetcode.com

Memory usage: 221 MB

</> Code

Python3  Auto

```
1 from typing import List
2
3 class Solution:
4     def generate(self, numRows: int) -> List[List[int]]:
5         finalNums = []
6         finalNums.append([1])
7         for i in range(numRows - 1):
8             newRow = [1]
9             for j in range(i):
10                 newRow.append(finalNums[i][j] + finalNums[i][j + 1])
11             newRow.append(1)
12             finalNums.append(newRow)
13         return finalNums
```


leetcode.com/problems/merge-two-sorted-lists/

Problem List < > 🔍

Run Submit

Merge Two Sorted Lists - LeetCode
leetcode.com

Memory usage: 285 MB

Code

Python3 Auto

```
1 class Solution:
2     def mergeTwoLists(self, list1: Optional[ListNode], list2: Optional[ListNode]) -> Optional[ListNode]:
3         head = list1
4         if(not list1):
5             head = list2
6         while(list1 and list2):
7             if(list2.val < list1.val and list1 == head):
8                 temp = list1
9                 list1 = list2
10                list2 = temp
11                head = list1
12            elif(list2.val >= list1.val and not list1.next):
13                list1.next = list2
14                break
15            elif(list2.val >= list1.val and list2.val < list1.next.val):
16                node = ListNode(list2.val, list1.next)
17                list1.next = node
18                list2 = list2.next
19                list1 = list1.next
20            else:
21                list1 = list1.next
22        return head
```


← → ↻ leetcode.com/problems/valid-parentheses/

⌵ Problem List < > 🔍

</> Code

Python3 ▾ 🔒 Auto

```
1 class Solution(object):
2     def isValid(self, s):
3         stack = [] # Initialize an empty list to represent the stack
4
5         if len(s) % 2 != 0:
6             return False
7         else:
8             left = ['(', '[', '{']
9             right = [')', ']', '}']
10
11             for char in s:
12                 if char in left:
13                     stack.append(char)
14                 elif char in right:
15                     if not stack: # Check if the stack is empty before
16                         return False
17                     top = stack.pop()
18                     if char == ')':
19                         if top != '(':
20                             return False
21                     elif char == '}':
22                         if top != '{':
23                             return False
24                     elif char == ']':
25                         if top != '[':
26                             return False
27             return not stack # Return True if the stack is empty, False otherwise
28
```

Valid Parentheses - LeetCode
leetcode.com

🔍 Memory usage: 82.9 MB