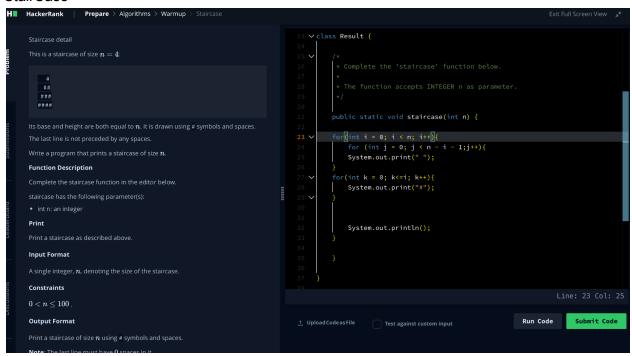
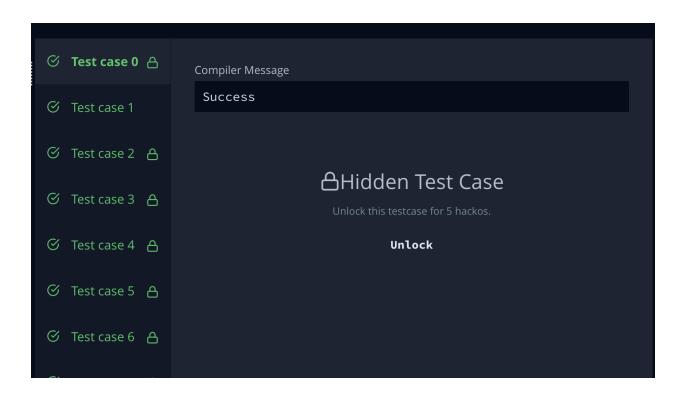
## StairCase





Time and Space complexity for StairCase problem:

Time Complexity: Since the code provides a nested for loop we have to take that into consideration, the inner loop involves (n - i - 1), and the outer loop involves (i + 1) iterations, since we have two loops involve, we iterate through it by n \* n/2, which equates to  $n^2$ . So the time complexity for the staircase problem is  $O(n^2)$ .

Space complexity: The memory this code takes up is not a lot, since it involves three variables (i, j, k) however all of those variables depend on the size of n, the only input used is n so the memory used does not change, even with different size of n. The Space complexity of this will be O(1).