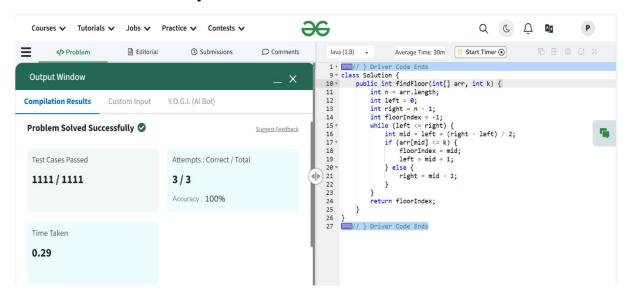
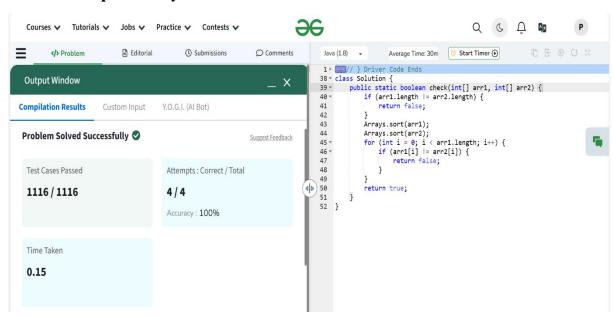
DSA Practice – 2

1. Floor in sorted array



Time Complexity: O(log n)

2. Check equal arrays



Time Complexity : O(n)

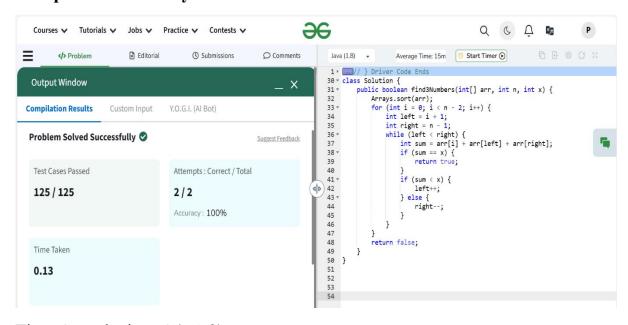
3.Palindrome linked list

```
class Solution {
  Node reverse(Node head) {
    Node prev = null;
     Node current = head;
     Node nextNode = null;
    while (current != null) {
       nextNode = current.next;
       current.next = prev;
       prev = current;
       current = nextNode;
     }
    return prev;
  boolean areIdentical(Node list1, Node list2) {
    while (list1 != null && list2 != null) {
       if (list1.data != list2.data) {
          return false;
       }
       list1 = list1.next;
       list2 = list2.next;
     }
    return list1 == null && list2 == null;
  boolean isPalindrome(Node head) {
    if (head == null || head.next == null) {
       return true;
```

```
}
                                   Node slow = head;
                                   Node fast = head;
                                   while (fast != null && fast.next != null) {
                                                 slow = slow.next;
                                                 fast = fast.next.next;
                                     }
                                   Node secondHalf = reverse(slow);
                                   Node firstHalf = head;
                                   while (secondHalf!= null) {
                                                 if (firstHalf.data != secondHalf.data) {
                                                              return false;
                                                firstHalf = firstHalf.next;
                                                 secondHalf = secondHalf.next;
                                     }
                                   return true;
                                                                                                                                                                                                       96
                                                                                                                                                                                                                                                                                                                                   Q C Q
     Courses V Tutorials V Jobs V Practice V Contests V
                                                                                                                                                                                                                        | Node | 
   Output Window
Compilation Results
                                                          Custom Input
                                                                                                      Y.O.G.I. (AI Bot)
  Problem Solved Successfully
                                                                                                                                                                    Suggest Feedback
     Test Cases Passed
                                                                                                         Attempts: Correct / Total
     1112 / 1112
                                                                                                                                                                                                                                                   olean areIdentical(Node list1, Node list2) {
  while (list1 |= null && list2 |= null) {
    if (list1.data |= list2.data) {
      return false;
    }
}
                                                                                                          Accuracy: 37%
     Time Taken
                                                                                                                                                                                                                                                      } return list1 == null && list2 == null;
     2.06
                                                                                                                                                                                                                                                  colean isPalindrome(Node head) {
  if (head == null || head.next == null) {
    return true;
}
```

Time Complexity: O(n)

4. Triplet sum in array



Time Complexity : O(n ^ 2)