1. Write code to check a String is palindrome or not? To using a function named “reverse()”, this check the vector and if the world is the samen is a palindrome.
2. How to find the first non repeated character of a given String? To using LinkedHashMap in a function and choose entry with value 1 to check if this repeat
3. How to check if two String are Anagram? You need to use indexOf() to get their carácter array and see if they are equal or not.
4. How to convert numeric String to int in Java? You can use Integer.parseInt(), this is the most easy and use method.
5. What is the difference between String, StringBuilder, and StringBuffer in Java? String is immutable but both StringBuilder and StringBuffer are mutable.
6. Why String is final in Java? The string is final because of same reason it is immutable.
7. In an array 1-100 exactly one number is duplicate how do you find it? Using brute force method because this compares each element of Array to all other elements and returns true if it finds duplicates.
8. Given two arrays, 1,2,3,4,5 and 2,3,1,0,5 find which number is not present in the second array. You need to campare if the 2 arrays are equal (===).
9. How do you find the second highest number in an integer array? You need to compare any string of the array (one to one) and if the predecessor is minor this is discarded.
10. How to find all pairs in an array? You need to divide by 2 every numbers of the array and if the result is 0, the number is even
11. How do you find middle element of a linked list in a single pass? Traverse the LinkedList to find the tail of the linked list where from null to find the length of the linked list and at the end traverse to the middle.
12. How do you find the 3rd element from last in a single pass? You use 2 pointers, initialize the first one and when it reaches the third place the second one is initialized.
13. How do you find if there is any loop in a singly linked list? How do you find the start of the loop? Using 2 pointers and the first pointer increments one step at a time and the second pointer increments two steps at a time, at some point the two pointers meet if there is a loop.
14. Difference between a linked list and array data structure? The main difference is that in an array the elements are located in the same memory sector and it is faster to retrieve them, in a linked list they are scattered in different parts of memory and it takes longer to find them.
15. Write code to print InOrder traversal of a tree? Iterations with the Fibonacci series algorithm or the string inversion algorithm can be used.
16. How is a binary search tree implemented? First you need to know about how to implement the BST in Java, and then check whether the BST is balanced or not.
17. Write a program to sort numbers in place using quick sort? Implementing the Quicksort algorithm is used to sort large lists and is compatible with most programming languages, in Java the Arrays.sort() method is used and it sorts them.
18. How do you sort Java objects using a Comparator? We need to use either compare() or compareTo() method defined in java.util.Comparator and java.lang.Comparable.
19. Write code to check whether an integer is Armstrong number or not? It is adding a 3-digit number so that in the cubed sum it is equal to its own number.
20. How to check if a number is binary? You need to create an operation that returns true if it only contains numbers 0 and 1, but if there are other numbers such as 2 or 3 it returns false.