

**DAILY ONLINE ACTIVITIES SUMMARY**

<b>Date:</b>	<b>19/05/2020</b>	<b>Name:</b>	<b>SUMAN RATHOD</b>
<b>Sem &amp; Sec</b>	<b>6<sup>th</sup> sem &amp; B sec</b>	<b>USN:</b>	<b>4AL17CS115</b>
<b>Online Test Summary</b>			
<b>Subject</b>	<b>CGV IA Test</b>		
<b>Max. Marks</b>	<b>60</b>	<b>Score</b>	<b>55</b>
<b>Certification Course Summary</b>			
<b>Course</b>	<b>Introduction to Full Stack Development</b>		
<b>Certificate Provider</b>	<b>Great Learning</b>	<b>Duration</b>	<b>1.5 hr(spent by me on that day to learn)</b>
<b>Coding Challenges</b>			
<b>Problem Statement:</b>  1. Java code to find shortest palindrome for the given string.  2. Write a simple code to identify given linked list is palindrome or not by using stack. First take a Stack. Traverse through each node of the linked list and push each node value to Stack. .			
<b>Status: Completed</b>			
<b>Uploaded the report in Github</b>		<b>Yes</b>	
<b>If yes Repository name</b>		<a href="https://github.com/SumanRathod009/onlinecoding">https://github.com/SumanRathod009/onlinecoding</a>	
<b>Uploaded the report in slack</b>		<b>Yes</b>	

## Online Test Details CGV

TEST Details:

**TECHGIG**


Hi Suman Rathod,

You have scored **55 marks** in **MCQ**.

[See Assessment](#)

---

About The Assessment



Computer Graphics and Visualization-Test-1  
Round 1 ends on: 19 May, 2020 (2 Minutes)

## Online Certification Details

Lessons completed:

1. Heading Tag
2. Hr and Br Tags
3. Anchor Tags
4. Absolute and relative path
5. Link it Online



← Quiz

### Hr and Br Tag

Type : Practice Quiz  
 Attempts : 2/2  
 Questions : 1  
 Scoring Policy : Highest Score  
 Your Score : 1.00/1

#### Attempt History

Date	Attempt	Marks	
May 19, 11:37 AM	2	1	<a href="#">View answers</a>
May 19, 11:37 AM	1	0	<a href="#">View answers</a>

← 8. Anchor Tag



← 9. Absolute and Relative path



← Quiz

### Absolute and Relative path

Type : Practice Quiz  
 Attempts : 1/2  
 Questions : 1  
 Scoring Policy : Highest Score  
 Your Score : 1.00/1

[RETAKE](#)

#### Attempt History

Date	Attempt	Marks	
May 19, 12:16 PM	1	1	<a href="#">View answers</a>

← 10. Link it Online



← Quiz

### Link it online

Type : Practice Quiz  
 Attempts : 1/2  
 Questions : 1  
 Scoring Policy : Highest Score  
 Your Score : 1.00/1

[RETAKE](#)

#### Attempt History

Date	Attempt	Marks	
May 19, 1:40 PM	1	1	<a href="#">View answers</a>

## Coding Challenge Details

1. We have a Letter or a word then we need add some letters to it and need to find out shortest palindrome

For example we take "S": S will be the shortest palindrome string.

If we take "xyz": zyxyz will be the shortest palindrome string

So we need to add some characters to the given string or character and find out what will be the shortest palindrome string by using simple java program.

```
1
2 import java.util.Scanner;
3
4 public class ShortestPalindromeDemo {
5
6     public static String shortestPalindrome(String str)
7
8     int x=0;
9     int y=str.length()-1;
10
11 while(y>=0){
12 if(str.charAt(x)==str.charAt(y)){
13 x++;
14 }
15 y--;
16 }
17
18 if(x==str.length())
19 return str;
20
21 String suffix = str.substring(x);
22 String prefix = new StringBuilder(suffix).reverse()
23 String mid = shortestPalindrome(str.substring(0, x)
24
25 return prefix+mid+suffix;
26 }
27
28 public static void main(String[] args)
29 {
30
31 Scanner in = new Scanner(System.in);
32
33 System.out.println("Enter a String to find out shor
34
35 String str=in.nextLine();
36
37 System.out.println("Shortest palindrome of "+str+"
38
39 }
40 }
```



```
× Terminal
Enter a String to find out shortest palindrome
amrutha is a good girl
Shortest palindrome of amrutha is a good girl is a good girl amrutha is a good girl
Process finished.
```

2. Write a simple code to identify given linked list is palindrome or not by using stack.

First take a Stack. Traverse through each node of the linked list and push each node value to Stack. Once the traversal & copying is done, iterate through linked list from head node again.

In each iteration, pop one stack element and compare with node value in respective iteration. It is expected to match stack popped value with node value.

In case of all matches, its a palindrome. Any one element mismatch makes it not a palindrome.

```
1 import java.util.Stack;
2
3 // Data Structure to store a linked list node
4 class Node {
5     int data;
6     Node next;
7
8     Node(int i)
9     {
10         this.data = i;
11         this.next = null;
12     }
13 };
14
15 class Main
16 {
17     // Function to determine if a given linked list is
18     public static boolean isPalindrome(Node head)
19     {
20         // construct an empty stack
21         Stack<Integer> s = new Stack<>();
22
23         // push all elements of the linked list into the stack
24         Node node = head;
25         while (node != null) {
26             s.push(node.data);
27             node = node.next;
28         }
29
30         // traverse the linked list again
31         node = head;
32         while (node != null)
33         {
34             // pop the top element from the stack
35             int top = s.pop();
36
37             // compare the popped element with current node's data
38             // return false if mismatch happens
39             if (top != node.data) {
40                 return false;
41             }
42
43             // advance to the next node
44             node = node.next;
45 }
```

```
46
47 // we reach here only when the linked list is palindrome
48 return true;
49 }
50
51 public static void main(String[] args)
52 {
53     Node head = new Node(1);
54     head.next = new Node(2);
55     head.next.next = new Node(3);
56     head.next.next.next = new Node(2);
57     head.next.next.next.next = new Node(1);
58
59     if (isPalindrome(head)) {
60         System.out.print("Linked List is a palindrome.");
61     } else {
62         System.out.print("Linked List is not a palindrome.");
63     }
64 }
65 }
```

A terminal window titled "Terminal" with a close button and a copy icon. It displays the output of the Java program: "Linked list is a palindrome." followed by "Process finished." on a new line. A green cursor is visible at the end of the second line.

```
× Terminal
Linked list is a palindrome.
Process finished.
```