DAILY ONLINE ACTIVITIES SUMMARY

Date:	**18/05/2020**	**Name:**	**Pragathi h d**
Sem & Sec	**8 sem B sec**	**USN:**	**4AL16CS066**
Online Test Summary			
Subject	**SMS**		
Max. Marks	**60**	**Score**	**44**
Certification Course Summary			
Course	**Introduction to ethical hacking**		
Certificate Provider	**Great Learning**	**Duration**	**6.00hrs**
Coding Challenges			
Problem Statement: java coding problem			
Status: Solved			
Uploaded the report in Github		**Uploaded**	
If yes Repository name		**Pragathijain**	
Uploaded the report in slack		**yes**	

Online Test Details: (Attach the snapshot and briefly write the report for the same)

Certification Course Details: (Attach the snapshot and briefly write the report for the same)

Coding Challenges Details: (Attach the snapshot and briefly write the report for the same)

Online coding

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.

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.

```
package shortestpalindromeexample.java;
import java.util.Scanner;

public class ShortestPalindromeDemo {

public static String shortestPalindrome(String str) {

int x=0;
int y=str.length()-1;

while(y>=0){
if(str.charAt(x)==str.charAt(y)){
x++;
}
y--;
}

if(x==str.length())
return str;

String suffix = str.substring(x);
String prefix = new StringBuilder(suffix).reverse().toString();
String mid = shortestPalindrome(str.substring(0, x));

return prefix+mid+suffix;
}

public static void main(String[] args) {
```

```
Scanner in = new Scanner(System.in);

System.out.println("Enter a String to find out shortest palindrome");

String str=in.nextLine();

System.out.println("Shortest palindrome of "+str+" is "+shortestPalindrome(str));

}

import java.util.Stack;
class Node {
int data;
Node next;
Node(int i)
{
this.data = i;
this.next = null;
}
};

class Main
{

public static boolean isPalindrome(Node head)
{

        Stack<Integer> s = new Stack<>();


        Node node = head;
        while (node != null) {
                s.push(node.data);
                node = node.next;
        }


        node = head;
        while (node != null)
        {

                int top = s.pop();


                if (top != node.data) {
                        return false;
                }

                // advance to the next node
                node = node.next;
        }
```

```
        return true;
}

public static void main(String[] args)
{
        Node head = new Node(1);
        head.next = new Node(2);
        head.next.next = new Node(3);
        head.next.next.next = new Node(2);
        head.next.next.next.next = new Node(1);

        if (isPalindrome(head)) {
                System.out.print("Linked List is a palindrome.");
        } else {
                System.out.print("Linked List is not a palindrome.");
        }
}
```

}

Online test

Hi Pragathi H D,

You have scored **44 marks** in **MCQ**.

See Assessment

About The Assessment

SMS_I_IA Enhanced Clone at 2020-05-18 10:47:27

Round 1 ends on: 18 May, 2020 (1 Hour)

Warm Regards,
TechGig Team

Certificate course