

DAILY ONLINE ACTIVITIES SUMMARY

Date:	18-05-2020	Name:	PRASANNA
Sem & Sec	8 th ,B	USN:	4AL16CS068
Online Test Summary			
Subject	SMS		
Max. Marks	60	Score	55
Certification Course Summary			
Course	Introduction to ethical hacking		
Certificate Provider	Great learner academy	Duration	6 Hrs
Coding Challenges			
<p>Problem Statement: prob1- <i>To add some letters for a given word or letter then to find the shortest palindrome possible</i></p> <p>Prob2- <i>To check whether the given linked list is palindrome or not</i></p>			
Status: Solved			
Uploaded the report in Github		Yes	
If yes Repository name		prasanna_k	
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)

1) Online Test Details:

Challenge Over

by TechGig

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

MCQ

Your Highest Score 55 Max Score 60

[Start Test](#)

Summary

Skills	Problem Solving Skills
Ends On	18 May

Details Winners FAQs My Submission

SMS FIRST IA RE ASSESSMENT

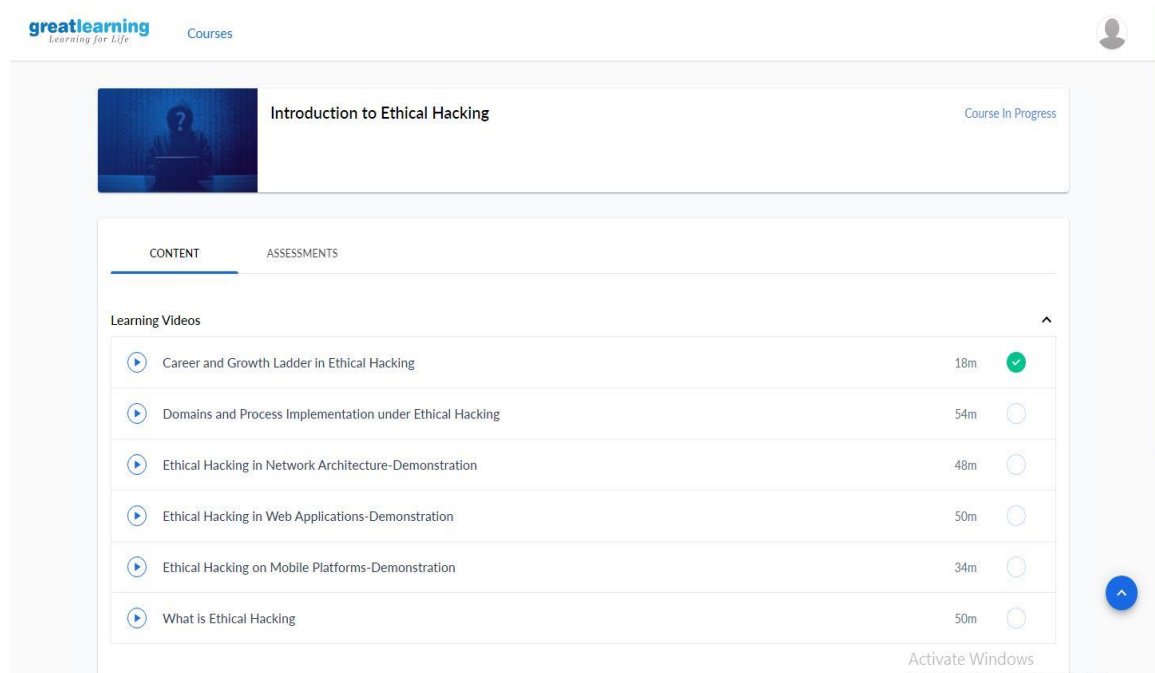
Rules

- Any participant can attempt the assessment only 1 times, Only your best score counts!!
- This test has negative marking as per the following rules -
 - MCQ**
 - 4 marks will be deducted for each incorrect 8 marks sms question
 - 2 marks will be deducted for each incorrect 3 marks sms1 question
 - 1 marks will be deducted for each incorrect 2 marks sms2 question
- Time duration is 60 minutes.
- In case your session expires before finishing the test, you can re-take the test. Your test will resume from where you left off, and the total time will reduce by the duration of your previous attempt.
- Winners of the assessment will be chosen solely on the discretion. Please ensure to update your profile and contact details.

2) Certification Course Details:

Certified ethical hackers make an average annual income of **\$80,074**, according to [Payscale](#). The average starting salary for a certified ethical hacker is **\$95,000**, according to EC-Council senior director Steven Graham. The founder of NoWiresSecurity, Eric

Geier, estimates a more conservative **\$50,000 to \$100,000 per year** in the first years of work depending on your employer, experience and education. Those with a few years of experience can pull **\$120,000 and upwards per year**, particularly those who work as independent.



Ethical Hacking Career: Job Profiles

After attaining the much coveted CEH v10, an ethical hacker can try for the following roles:

- Information Security Analyst
- Security Analyst
- Certified Ethical Hacker (CEH)
- Ethical Hacker
- Security Consultant, (Computing / Networking / Information Technology)
- Information Security Manager
- Penetration Tester

3) Coding Challenges:

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

Prog1:

```
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));

}

```

Prog 2:

```

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 s = new Stack<>();

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

```

```

// traverse node =
head; while (node
!= null)
{
int top = s.pop(); //pop

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

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.");
}
}
}
}

```