DAILY ONLINE ACTIVITIES SUMMARY

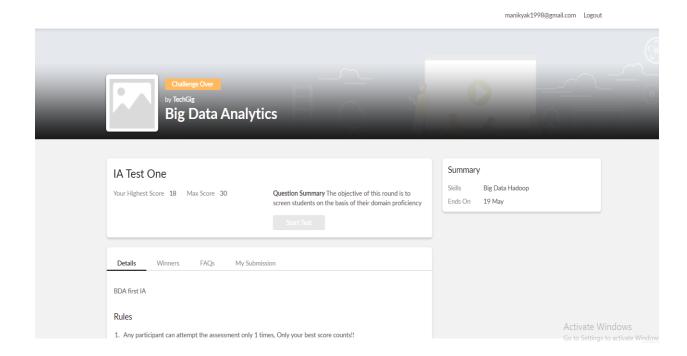
Date:	19-05-20	20	Name:	Manikya K				
Sem & Sec	8 th ,B		USN:	4AL16CS050				
	I	Online To	est Summary	7				
Subject Big data analytic								
Max. Marks 30			Score	18				
Certification Course Summary								
Course	Introduc	Introduction to ethical hacking						
Certificate Provider		Great learner academy	Duration		6 Hrs			
Coding Challenges								
Problem Statement: prob1- To add some letters for a given word or letter then to find the shortest palindrome possible								
Prob2- To check whether the given linked list is palindrome or not								
Status: Solved								
Uploaded the report in Github			Yes	Yes				
If yes Repos	itory nam	ne	manikya-20	manikya-20				
Uploaded th	e report i	n 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)

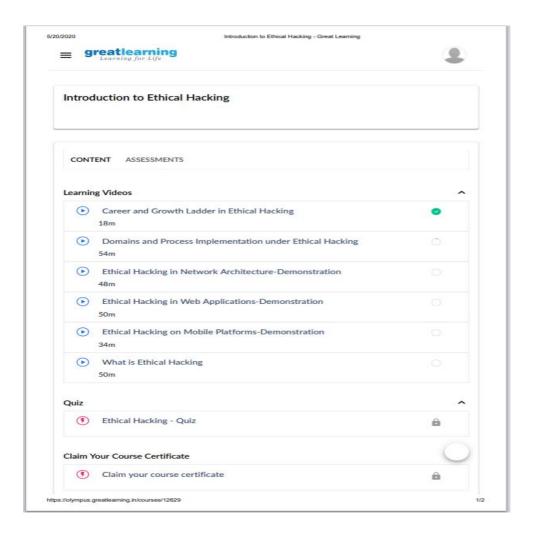
Coding Challenges Details: (Attach the snapshot and briefly write the report for the same)

1) Online Test Details:



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 consultants.



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



An ethical hacker finds a job in any company which has an internet facing side or anything to do with the web. These include college institutions like MIT and even private companies ranging from logistic services to data warehousing companies. Apart from these, you also get a chance to work for the military and top-secret intelligence gathering agencies like the CIA, Mossad, NSA.

Ethical Hacker Skill Set

A person with an ethical hacking career is expected to be proficient in database handling, networking, and operating systems and also have excellent soft skills as they need to communicate problems regarding security to the rest of the organization. Other than these generalized skillsets, an ethical hacker also have a good grasp on the following skills:

- Network traffic sniffing
- Orchestrate various network attacks
- Exploit buffer overflow vulnerabilities
- SQL injection
- Password guessing and cracking
- Session hijacking and spoofing
- DNS spoofing

3) Coding Challenges:

- 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.");
```