DAILY ONLINE ACTIVITIES SUMMARY

Date:	**19-5-2020**	**Name:**	**Prajna**
Sem & Sec	**8th sem 'B'**	**USN:**	**4AL16CS067**

Online Test Summary

Subject	**BDA**		
Max. Marks	**30**	**Score**	**18**

Certification Course Summary

Course	**Getting started: Hadoop**		
Certificate Provider	**Great Learning**	**Duration**	**40min**

Coding Challenges

Problem Statement:1.Write a program to find the shortest palindrome using linked list.
2.Write a java program to find the linked list is palindrome or not

Status: Completed

Uploaded the report in GitHub GitHub link:	**Yes https://github.com/4al16cs067/onlineactivitesreport**
If yes Repository name	**onlineactivitiesreport**
Uploaded the report in slack	**yes**

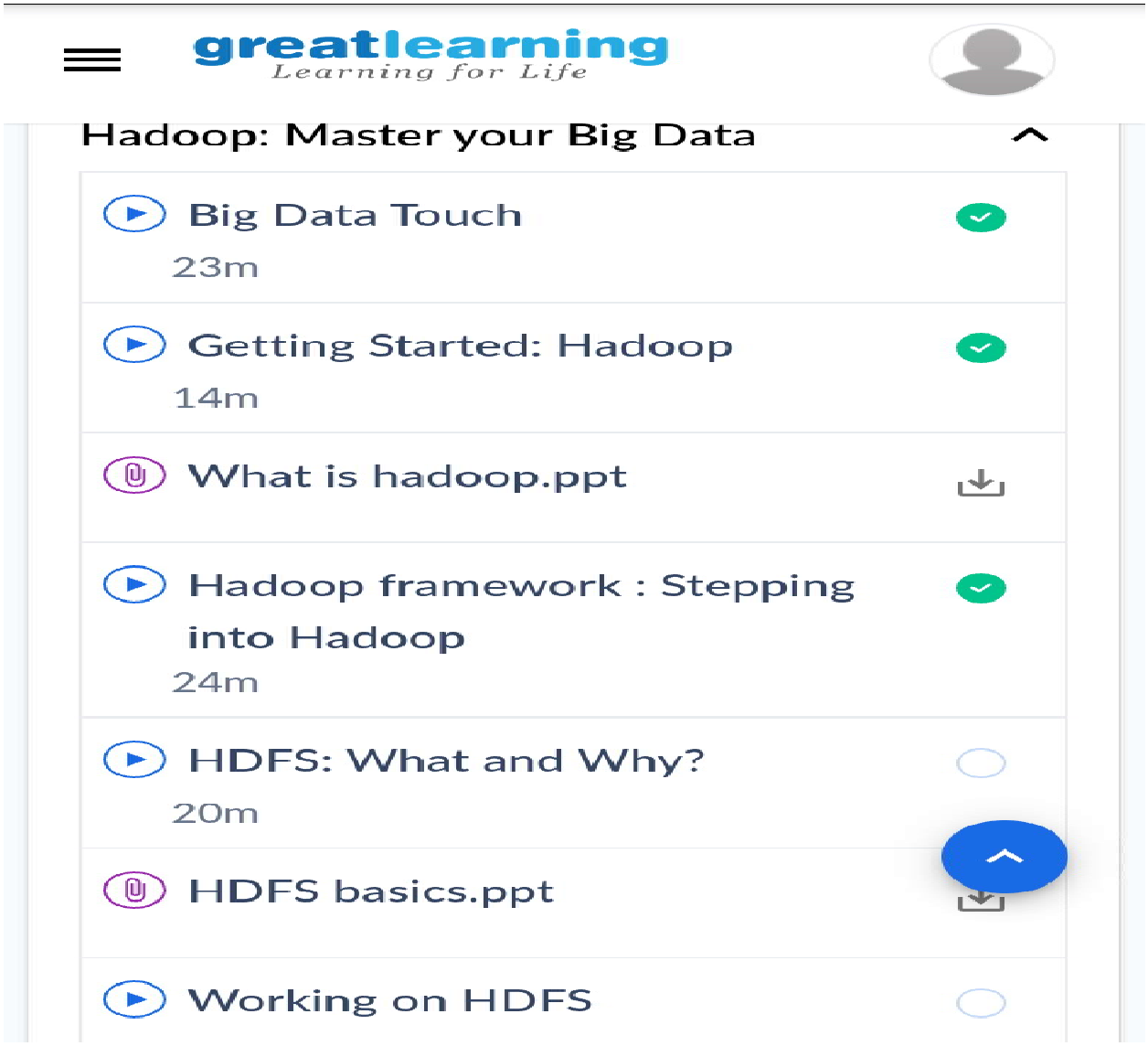
Online Test Details: (Attach the snapshot and briefly write the report for the same)

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

2) certification course



3) coding challenges

Program1

```
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));

}
```

Program 2

```
import java.util.Stack;

class Node {
int data;
```

```
Node next;

Node(int i)
{
this.data = i;
this.next = null;
}
};

class Main
{
// Function to determine if a given linked list is palindrome or not
public static boolean isPalindrome(Node head)
{
// construct an empty stack
Stack s = new Stack<>();

// push all elements of the linked list into the stack
Node node = head;
while (node != null) {
s.push(node.data);
node = node.next;
}

// traverse the linked list again
node = head;
while (node != null)
{
// pop the top element from the stack
int top = s.pop();

// compare the popped element with current node's data
// return false if mismatch happens
if (top != node.data) {
return false;
}

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

// we reach here only when the linked list is palindrome
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.");
}
}
```