DAILY ONLINE ACTIVITIES SUMMARY

Date:	**19/05/2020**	**Name:**	**Chethana j**
Sem & Sec	**6th A**	**USN:**	**4al17cs022**

Online Test Summary

Subject	**CGV**		
Max. Marks	**60**	**Score**	

Certification Course Summary

Course	**Python for Machine learning**		
Certificate Provider	**Great Learning**	**Duration**	**5 hrs.**

Coding Challenges

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

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.

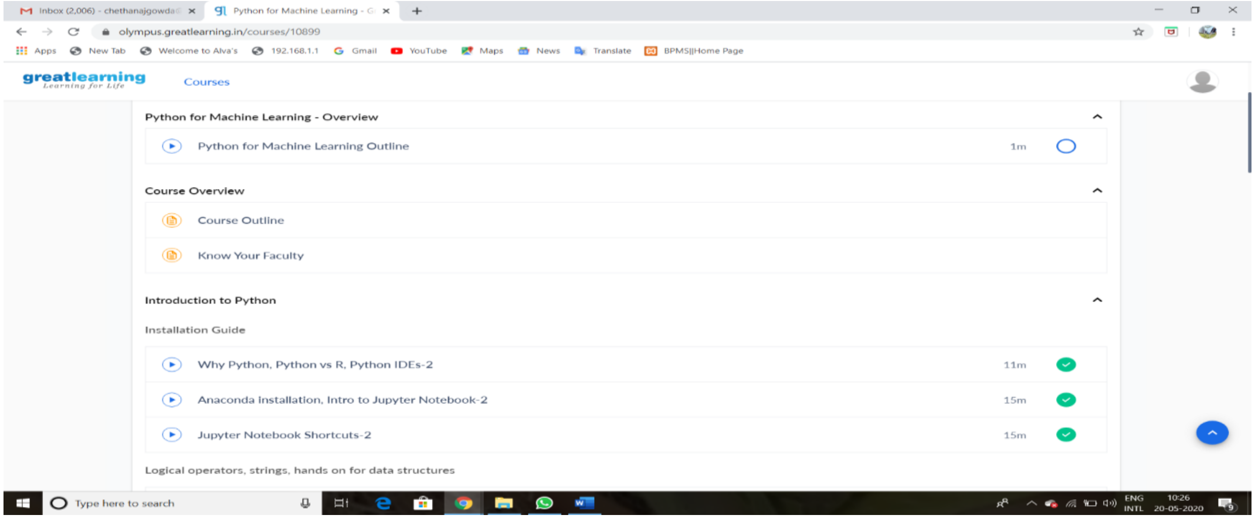
Status: Completed

Uploaded the report in Github	**yes**
If yes Repository name	https://github.com/Jchethana1990/online-course
Uploaded the report in slack	**yes**

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

(Not attended due to technical issue (I have informed to sir))

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



Python for Machine Learning - Overview

- Python for Machine Learning Outline 1m ○

Course Overview

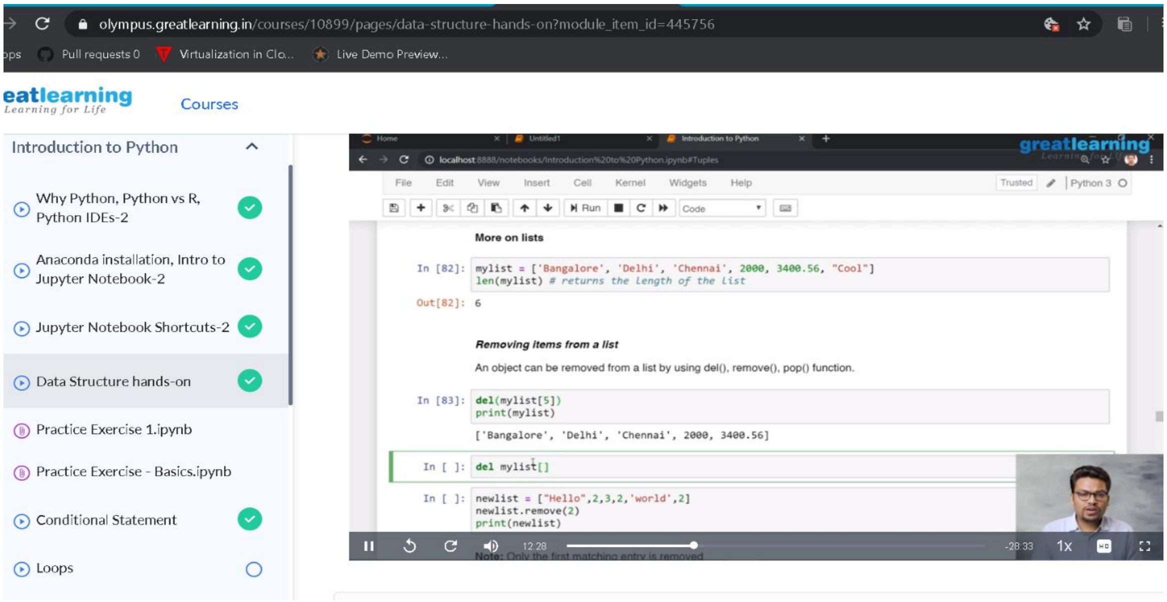
- Course Outline
- Know Your Faculty

Introduction to Python

Installation Guide

- Why Python, Python vs R, Python IDEs-2 11m ✓
- Anaconda Installation, Intro to Jupyter Notebook-2 15m ✓
- Jupyter Notebook Shortcuts-2 15m ✓

Logical operators, strings, hands on for data structures



Introduction to Python

- Why Python, Python vs R, Python IDEs-2 ✓
- Anaconda installation, Intro to Jupyter Notebook-2 ✓
- Jupyter Notebook Shortcuts-2 ✓
- Data Structure hands-on ✓
- Practice Exercise 1.ipynb
- Practice Exercise - Basics.ipynb
- Conditional Statement ✓
- Loops ○

More on lists

```
In [82]: mylist = ['Bangalore', 'Delhi', 'Chennai', 2000, 3400.56, "Cool"]
         len(mylist) # returns the length of the list
Out[82]: 6
```

Removing items from a list

An object can be removed from a list by using del(), remove(), pop() function.

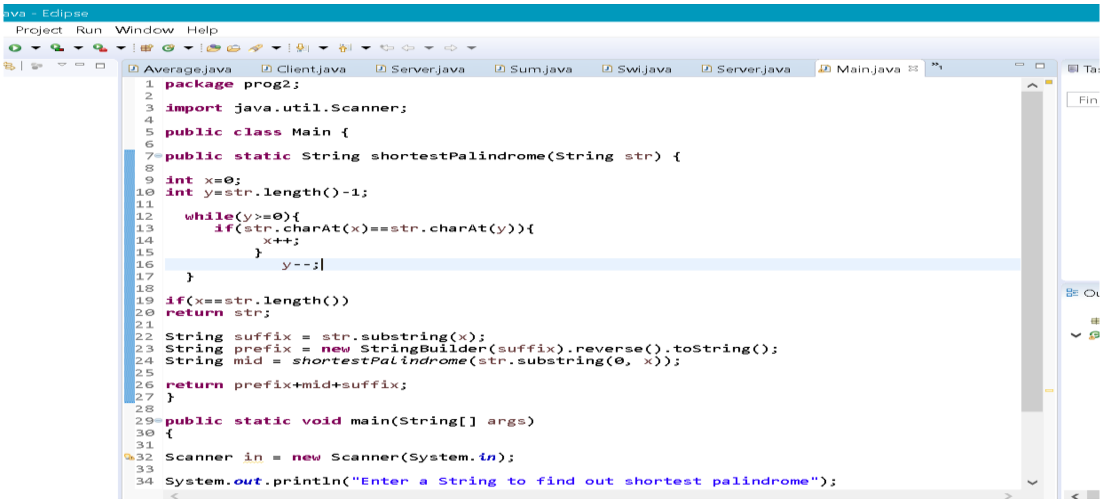
```
In [83]: del(mylist[5])
         print(mylist)

         ['Bangalore', 'Delhi', 'Chennai', 2000, 3400.56]

In [ ]: del mylist[]

In [ ]: newlist = ["Hello",2,3,2,'world',2]
        newlist.remove(2)
        print(newlist)
```

Note: Only the first matching entry is removed

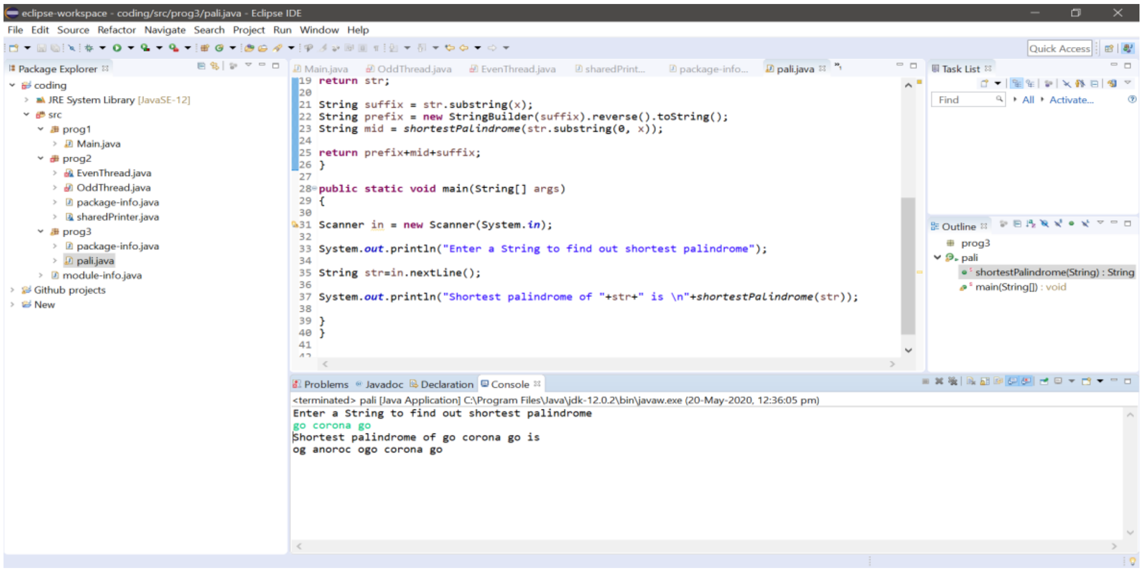
Coding Challenges Details: (Attach the snapshot and briefly write the report for the same)

Program1:

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.



```java
package prog2;

import java.util.Scanner;

public class Main {

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");
```

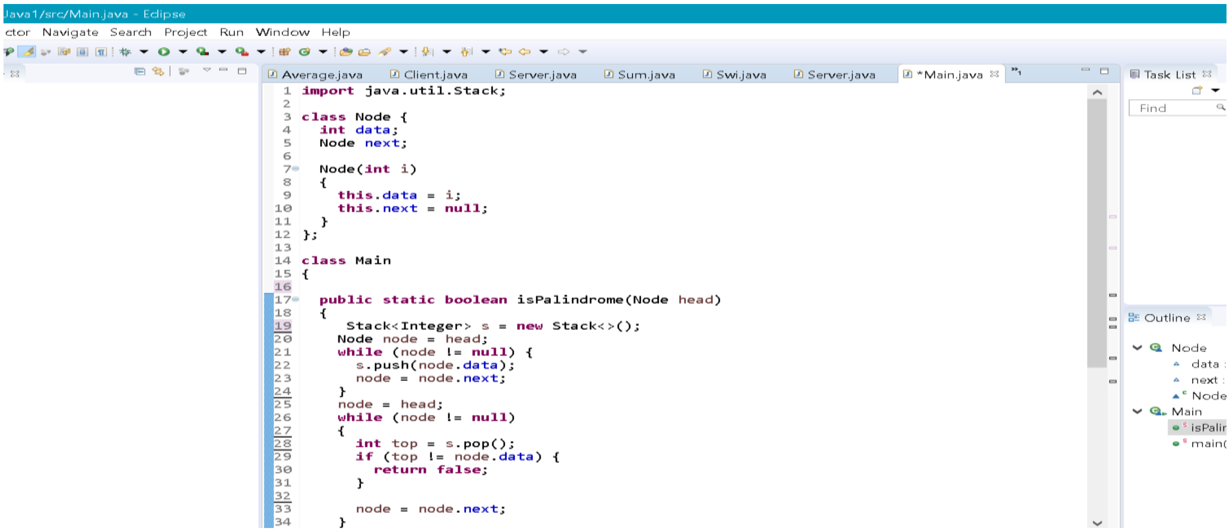


```java
return str;

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 \n"+shortestPalindrome(str));

}
}
```

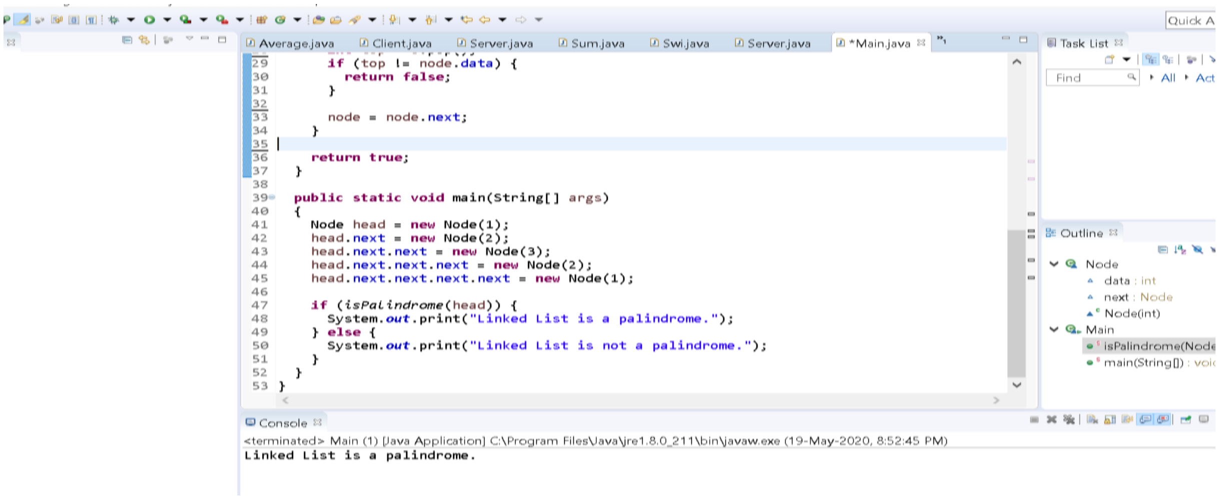
```
<terminated> pali [Java Application] C:\Program Files\Java\jdk-12.0.2\bin\javaw.exe (20-May-2020, 12:36:05 pm)
Enter a String to find out shortest palindrome
go corona go
Shortest palindrome of go corona go is
og anoroc ogo corona go
```

Program2:

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.



```java
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;
      }

      node = node.next;
    }
```



```java
      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.");
    }
  }
}
```

```
<terminated> Main (1) [Java Application] C:\Program Files\Java\jre1.8.0_211\bin\javaw.exe (19-May-2020, 8:52:45 PM)
Linked List is a palindrome.
```