








## DAILY ONLINE ACTIVITIES SUMMARY

Date:	02-06-2020	Name:	D Jasmine Joyline
Sem & Sec	VI Sem A	USN:	4AL17CS024
<b>Online Test Summary</b>			
Subject	CGV		
Max. Marks	30	Score	27
<b>Certification Course Summary</b>			
Course	Python Bootcamp 2020:Build 15 working applications and games		
Certificate Provider	Udemy	Duration	32hr
<b>Coding Challenges</b>			
<b>Problem Statement:</b> 1. Write a Java program to detect loop in a linked list 2. Write a Java Program to find inversion count of array.			
<b>Status:Completed</b>			
Uploaded the report in Github		Yes	
If yes Repository name		<a href="https://github.com/alvas-education-foundation/D_Jasmine_Joyline/tree/master/daily_progress">https://github.com/alvas-education-foundation/D_Jasmine_Joyline/tree/master/daily_progress</a>	
Uploaded the report in slack		Yes	

## Online Test Details:

### CGV IA TEST

9:46 4G 1.00 KB/S LTE        89

CGV Test

CGV Test

Total points **27/30** ?

*Mention your name and USN without fail, otherwise your form will be rejected. Choose the correct answer. Don't choose multiple answers. Each question carries ONE mark and Maximum duration is 30 minutes. Submission of more than one form is not allowed. Submit the form before 10.00 AM, otherwise it will be rejected.*

Name

D Jasmine Joyline

USN

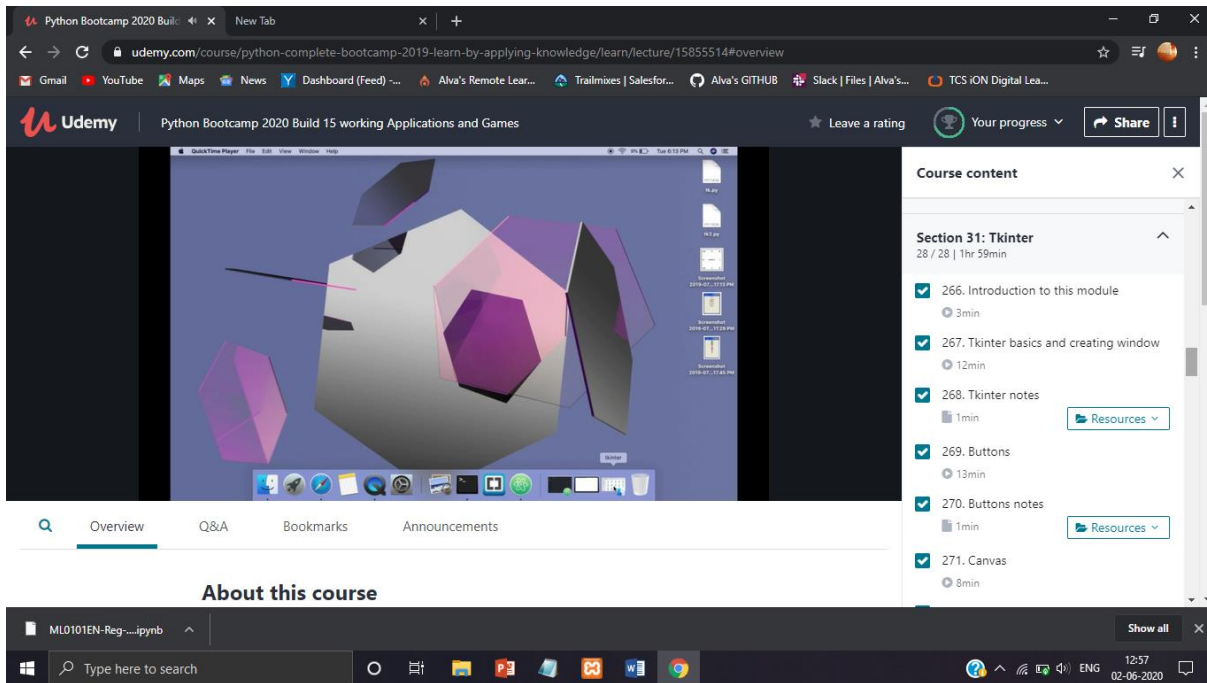
4AL17CS024

!

## Certification Course Details:

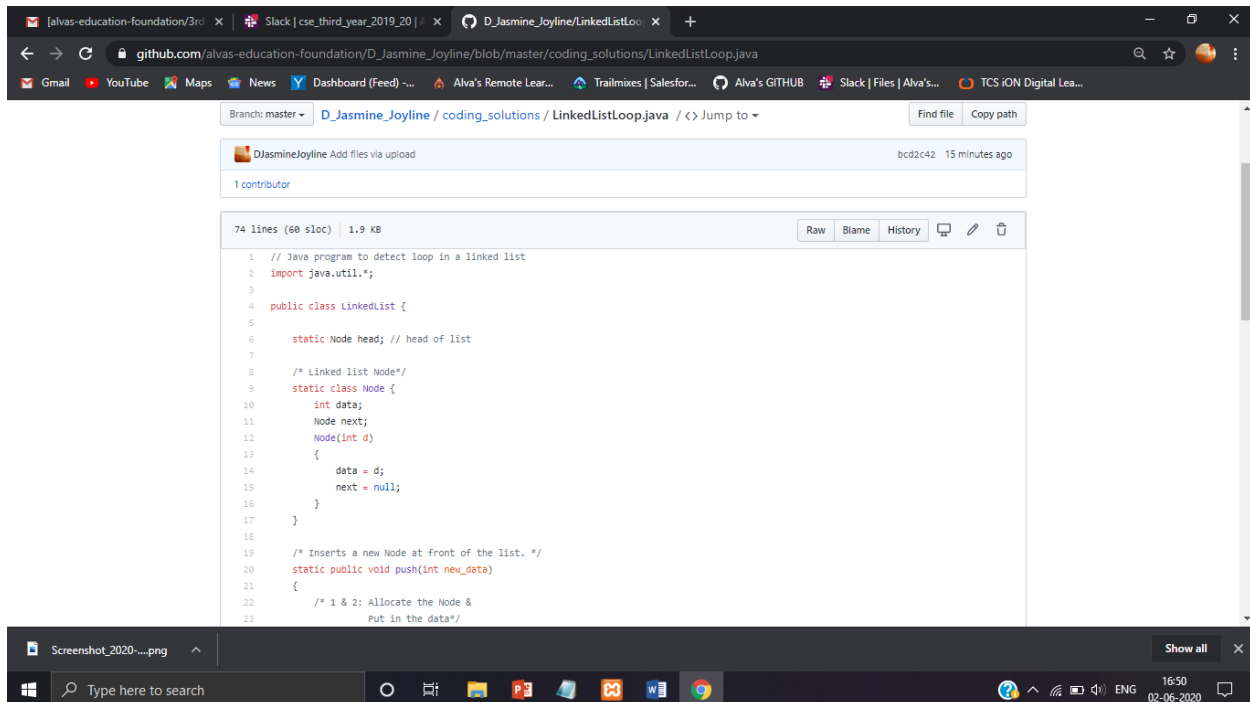
Module that I have completed today:

- Tkinter



## Coding Challenges Details:

### 1. Java program to detect loop in a linked list



### 2. Write a Java Program to find inversion count of array.

**Inversion Count:** For an array, inversion count indicates how far (or close) the array is from being sorted. If array is already sorted then inversion count is 0. If array is sorted in reverse order that inversion count is the maximum.

Formally, two elements  $a[i]$  and  $a[j]$  form an inversion if  $a[i] > a[j]$  and  $i < j$ .

**Input:**

The first line of input contains an integer  $T$  denoting the number of test cases. The first line of each test case is  $N$ , the size of array. The second line of each test case contains  $N$  elements.

**Output:**

Print the inversion count of array.

**Constraints:**

$$1 \leq T \leq 100$$

$$1 \leq N \leq 10^7$$

$$1 \leq C \leq 10^{18}$$

**Example:**

**Input:**

1

5

2 4 1 3 5

**Output:**

3

**Explanation:**

**Testcase 1:** The sequence 2, 4, 1, 3, 5 has three inversions (2, 1), (4, 1), (4, 3).

The screenshot shows a web browser window with multiple tabs. The active tab is 'D\_Jasmine\_Joyline/inversioncount.java'. The browser address bar shows the URL 'github.com/alvas-education-foundation/D\_Jasmine\_Joyline/blob/master/coding\_solutions/inversioncount.java'. The page content displays the file 'inversioncount.java' with 51 lines (50 sloc) and a size of 1.45 KB. The file content is as follows:

```
1  /*Given an array of positive integers. Write a Java Program to find inversion count of array.
2  Inversion Count: For an array, inversion count indicates how far (or close) the array is from being sorted. If array is already sorted then
3  Formally, two elements a[i] and a[j] form an inversion if a[i] > a[j] and i < j.
4  Input:
5  The first line of input contains an integer T denoting the number of test cases. The first line of each test case is N, the size of array.
6  Output:
7  Print the inversion count of array.
8  Constraints:
9  1 ≤ T ≤ 100
10 1 ≤ N ≤ 10^7
11 1 ≤ C ≤ 10^18
12 Example:
13 Input:
14 1
15 5
16 2 4 1 3 5
17 Output:
18 3
19 Explanation:
20 Testcase 1: The sequence 2, 4, 1, 3, 5 has three inversions (2, 1), (4, 1), (4, 3).
21 */
22 import java.util.*;
23 public class Main
```