

DAILY ONLINE ACTIVITIES SUMMARY

Date:	04/07/2020	Name:	Pramod R
Sem & Sec	4 th sem B section	USN:	4AL18CS059
Online Test Summary			
Subject	–		
Max. Marks	–	Score	–
Certification Course Summary			
Course	What is Data Science		
Certificate Provider	Udemy	Duration	3 weeks
Coding Challenges			
Problem statement: Given an array of integer arr[] and an integer k, the task is to find the median of each window of size k starting from the left and moving towards the right by one position each time.			
Status: Completed			
Uploaded the report in Github		yes	
If yes Repository name		https://github.com/alvas-education-foundation/Pramod_R	
Uploaded the report in slack		yes	

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



The course I have chosen during the lockdown period is What is Data Science. Since I had previously knew few topics about data science iam continuing this course.Today learnt about android features using data science concepts . It helps me to be perfect in data science.

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

A screenshot of a web browser displaying a GitHub repository. The browser's address bar shows the URL: `github.com/alvas-education-foundation/Pranod_R/new/master/coding_solutions`. The main content area shows a Java code file. The code defines a package `median`, imports `java.util.TreeSet`, and defines a public class `Array_median`. Inside this class, there is a static class `Pair` that implements `Comparable<Pair>`. The `Pair` class has private attributes `value` and `index`, a constructor `Pair(int v, int p)`, and methods `compareTo(Pair o)`, `value()`, and `toString()`. The `compareTo` method compares the `index` of two pairs, and the `toString` method returns a string representation of the pair. The `Array_median` class also has a static method `printMedian(TreeSet<Pair> minSet, TreeSet<Pair> maxSet)` which is partially visible at the bottom of the code block.

```
1 package median;
2 import java.util.TreeSet;
3 public class Array_median
4 {
5     static class Pair implements Comparable<Pair>
6     {
7         private int value, index;
8         public Pair(int v, int p)
9         {
10             value = v;
11             index = p;
12         }
13         @Override
14         public int compareTo(Pair o)
15         {
16             if (index == o.index) {
17                 return 0;
18             }
19             else if (value == o.value) {
20                 return Integer.compare(index, o.index);
21             }
22             else {
23                 return Integer.compare(value, o.value);
24             }
25         }
26         public int value()
27         {
28             return value;
29         }
30         public void renew(int v, int p)
31         {
32             value = v;
33             index = p;
34         }
35         @Override
36         public String toString()
37         {
38             return String.format("(%d, %d)", value, index);
39         }
40     }
41 }
42 static void printMedian(TreeSet<Pair> minSet,
```

The question we had received today was :

Given an array of integer `arr[]` and an integer `k`, the task is to find the median of each window of size `k` starting from the left and moving towards the right by one position each time.

Code: The above snapshot is the code which I have uploaded in my github repository.