# DAILY ONLINE ACTIVITIES SUMMARY

| Date: | 18-05-2020 | Name: | Madan G Gudigar |
|---|---|---|---|
| Sem & Sec | VI A | USN: | 4AL17CS048 |

### Online Test Summary

| Subject | CNSC  IA Test | | |
|---|---|---|---|
| Max. Marks | 60 | Score | 44 |

### Certification Course Summary

| Course | Web Development with Python and Javascript | | |
|---|---|---|---|
| Certificate Provider | Harvard University | Duration | 12weeks |

### Coding Challenges

**Problem Statement:**

**1.** Using methods charAt() & length() of String class, write a program to print the frequency of each character in a string.

**2.** Write down a java program to print even and odd numbers series respectively from two threads: t1 and t2 synchronizing on a shared object
Let t1 print message "ping — >" and t2 print message ",—-pong".

**Status:Completed**

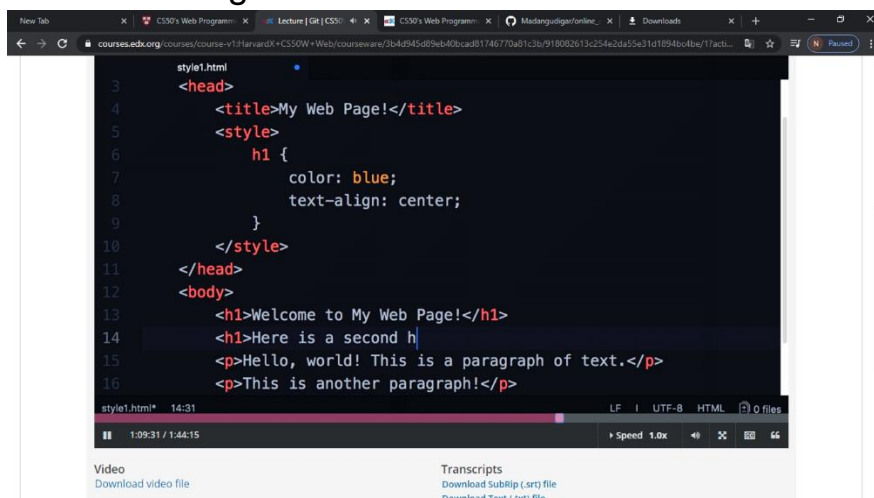| Uploaded the report in Github | Yes |
|---|---|
| If yes Repository name | https://github.com/Madangudigar/online_coding |
| Uploaded the report in slack | Yes |

# Online Test Details
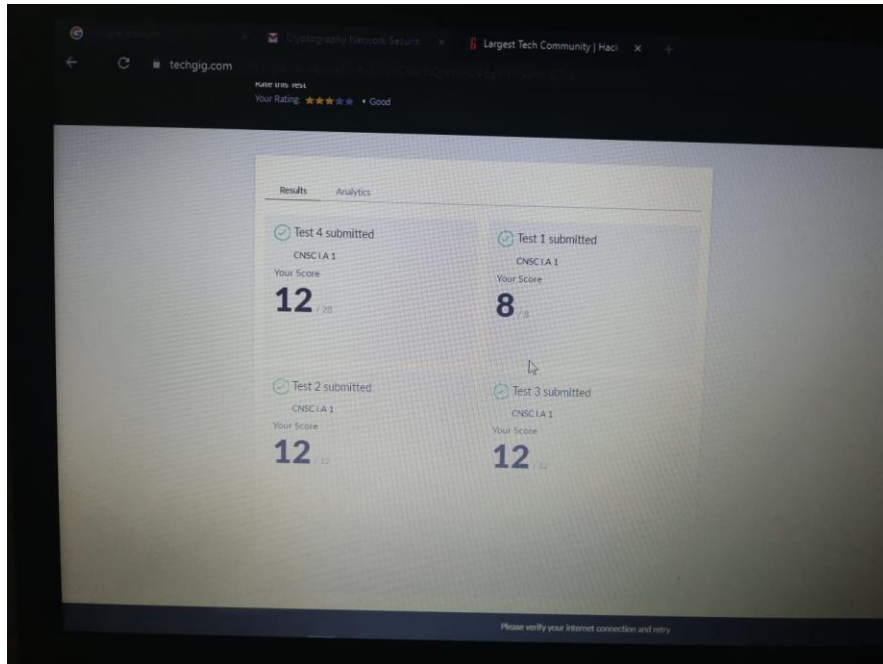


# Online Certification Details

Lesson-1
- Learning about Git

# Coding Challenge Details

1. Using methods charAt() & length() of String class, write a program to print the frequency of   each character in a string.

```
1  import java.util.*;
2
3  public class Main
4  {
5  public static void main(String args[])
6  {
7  int i;
8  String s;
9  int c[] = new int[256];
10 Scanner sc = new Scanner(System.in);
11 System.out.print("Enter a String : ");
12 s=sc.nextLine();
13 for (i = 0; i < s.length(); i++)
14 c[(int) s.charAt(i)]++;
15 for (i = 0; i < 256; i++) {
16 if (c[i] != 0) {
17 System.out.println((char)i + ": " + c[i]);
18 }
19 }
20 }
21 }
```

```
✕   Terminal                              ⬓
Enter a String : sathvik
a:  1
h:  1
i:  1
k:  1
s:  1
t:  1
v:  1

Process finished.
```

2. Write down a java program to print even and odd numbers series respectively from two threads: t1 and t2 synchronizing on a shared object
Let t1 print message "ping — >" and t2 print message ",—-pong".

```
1  class OddThread extends Thread
2  {
3  int limit;
4  sharedPrinter printer;
5  public OddThread(int limit, sharedPrinter printer)
6  {
7  this.limit = limit;
8  this.printer = printer;
9  }
10 @Override
11 public void run()
12 {
13 int oddNumber = 1;
14 while (oddNumber <= limit)
15 {
16 printer.printOdd(oddNumber);
17 oddNumber = oddNumber + 2;
18 }
19 }
20 }
21
22 class EvenThread extends Thread
23 {
24 int limit;
25 sharedPrinter printer;
26 public EvenThread(int limit, sharedPrinter printer
27 {
28 this.limit = limit;
29 this.printer = printer;
30 }
31 @Override
32 public void run()
33 {
34 int evenNumber = 2;
35 while (evenNumber <= limit)
36 {
37 printer.printEven(evenNumber);
38 evenNumber = evenNumber + 2;
39 }
40 }
41 }
42 class sharedPrinter
43 {
44
```

```java
45    boolean isOddPrinted = false;
46
47
48    synchronized void printOdd(int number)
49    {
50    while (isOddPrinted)
51    {
52    try
53    {
54    wait();                                                    me(
55    }
56    catch (InterruptedException e)
57    {
58    e.printStackTrace();
59    }
60    }
61    System.out.println(Thread.currentThread().getName(
62    isOddPrinted = true;
63    try
64    {
65    Thread.sleep(1000);
66    }
67    catch (InterruptedException e)
68    {
69    e.printStackTrace();
70    }
71    notify();
72    }
73
74    synchronized void printEven(int number)
75    {
76    while (! isOddPrinted)
77    {
78    try
79    {
80    wait();
81    }
104   SharedPrinter printer = new SharedPrinter();
105   OddThread oddThread = new OddThread(20, printer);
106   oddThread.setName("--pong");
107   EvenThread evenThread = new EvenThread(20, printer
108   evenThread.setName("ping - >");
109   oddThread.start();
110   evenThread.start();
111   }
112   }
```

```
✕  Terminal                                          ⧉

--pong 1
ping — > 2
--pong 3
ping — > 4
--pong 5
ping — > 6
--pong 7
ping — > 8
--pong 9
ping — > 10
--pong 11
ping — > 12
--pong 13
ping — > 14
--pong 15
ping — > 16
--pong 17
ping — > 18
--pong 19
ping — > 20

Process finished.
```