DAILY ONLINE ACTIVITIES SUMMARY

Date:	**18-05-2020**	**Name:**	**Manikya K**
Sem & Sec	**8th,A**	**USN:**	**4AL16CS050**

Online Test Summary

Subject	**SMS (IA1)**		
Max. Marks	**60**	**Score**	**52**

Certification Course Summary

Course	**Introduction to ethical hacking**		
Certificate Provider	**Great learner academy**	**Duration**	**6 Hrs**

Coding Challenges

Problem Statement: prob1- Using methods charAt() & length() of String class, write a program to print the frequency of each character in a string.

Prob2-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”. Take as command line arguments, the following inputs to the program: Sleep Interval for thread t1

Status: Solved

Uploaded the report in Github	**Yes**
If yes Repository name	**manikya-20**
Uploaded the report in slack	**Yes**

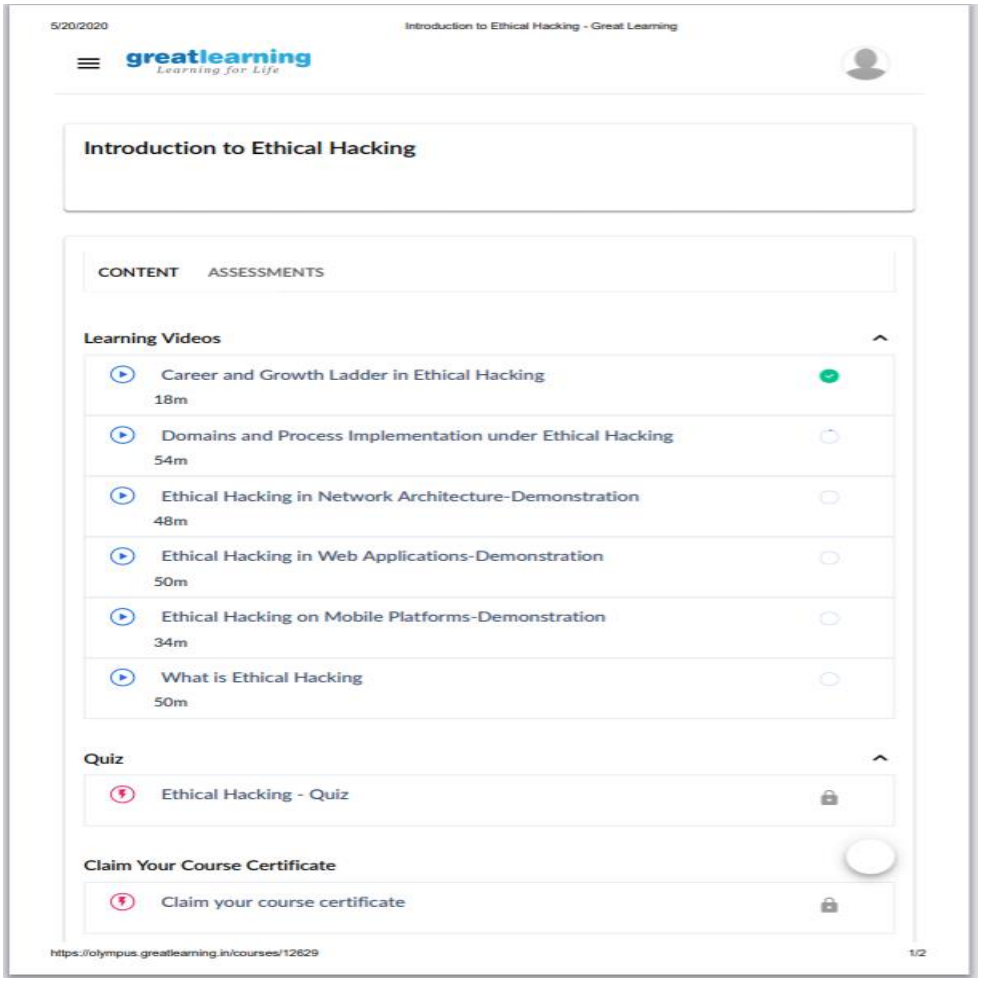
Online Test Details: (Attach the snapshot and briefly write the report for the same)

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) Certification Course Details:

Certified ethical hackers make an average annual income of **$80,074**, according to Payscale. The average starting salary for a certified ethical hacker is **$95,000**, according to EC-Council senior director Steven Graham. The founder of No Wires Security, Eric Geier, estimates a more conservative **$50,000 to $100,000 per year** in the first years of work depending on your employer, experience and education. Those with a few years of experience can pull **$120,000 and upwards per year**, particularly those who work as independent consultants.



Ethical Hacking Career: Job Profiles

After attaining the much coveted CEH v10,an ethical hacker can try for the following roles:

- Information Security Analyst
- Security Analyst
- Certified Ethical Hacker (CEH)
- Ethical Hacker
- Security Consultant, (Computing / Networking / Information Technology)
- Information Security Manager
- Penetration Tester

An ethical hacker finds a job in any company which has an internet facing side or anything to do with the web. These include college institutions like MIT and even private companies ranging

from logistic services to data warehousing companies. Apart from these, you also get a chance to work for the military and top-secret intelligence gathering agencies like the CIA, Mossad, NSA.

Ethical Hacker Skill Set

A person with an ethical hacking career is expected to be proficient in database handling, networking, and operating systems and also have excellent soft skills as they need to communicate problems regarding security to the rest of the organization. Other than these generalized skillsets, an ethical hacker also have a good grasp on the following skills:

- Network traffic sniffing
- Orchestrate various network attacks
- Exploit buffer overflow vulnerabilities
- SQL injection
- Password guessing and cracking
- Session hijacking and spoofing
- DNS spoofing

2) Coding Challenges:

1) Using methods charAt() & length() of String class, write a program to print the frequency of each character in a string.
“Hello friend”
Output should be
-: 1
d: 1
e: 2
f: 1
(continued for all character in the string)

```
package pk;
import java.util.Scanner;
public class StringOperators
{
public static void main(String args[])
{
int i;
String str;

int counter[] = new int[256];
Scanner in = new Scanner(System.in);
```

```
System.out.print("Enter a String : ");
str=in.nextLine();

for (i = 0; i < str.length(); i++) {
counter[(int) str.charAt(i)]++;
}
// Print Frequency of characters
for (i = 0; i < 256; i++) {
if (counter[i] != 0) {
System.out.println((char) i + ":-" + counter[i] + " times");
}
}
}
}
```

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”.
Take as command line arguments, the following inputs to the program:
Sleep Interval for thread t1
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”.

Take as command line arguments, the following inputs to the program:
Sleep Interval for thread t1
Sleep Interval for thread t2
Message per cycle
No of cycles

```
public class PingPong extends Thread {
static StringBuilder object = new StringBuilder("");

public static void main(String[] args) throws InterruptedException {

Thread t1 = new PingPong();
Thread t2 = new PingPong();

t1.setName("\nping");
t2.setName(" pong");
```

```
t1.start();
t2.start();
}

@override
public void run() {
working();
}

void working() {
while (true) {
synchronized (object) {
try {
System.out.print(Thread.currentThread().getName());
object.notify();
object.wait();
} catch (InterruptedException e) {
e.printStackTrace();
}
}
}
}
}

package pk;
import java.util.Scanner;
public class StringOperators
{
public static void main(String args[])
{
int i;
String str;

    int counter[] = new int[256];

    Scanner in = new Scanner(System.in);


    System.out.print("Enter a String : ");

    str=in.nextLine();


     for (i = 0; i < str.length(); i++) {

        counter[(int) str.charAt(i)]++;
```

```
    }

    // Print Frequency of characters

    for (i = 0; i < 256; i++) {

        if (counter[i] != 0) {

              System.out.println((char) i  + ":-" + counter[i] + " times");

        }

    }
}
}
```

```
public class PingPong extends Thread {
static StringBuilder object = new StringBuilder("");

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Thread t1 = new PingPong();
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t1.setName("\nping");
t2.setName(" pong");

t1.start();
t2.start();
}

@override
public void run() {
working();
}

void working() {
while (true) {
synchronized (object) {
try {
System.out.print(Thread.currentThread().getName());
object.notify();
object.wait();
} catch (InterruptedException e) {
e.printStackTrace();
}

}
}
```