# **Advanced Distributed Systems**

## **Assignment 2**

Assignment given on: 1st Sept 2021

Due Date: 14th Sept 2021

(Maximum two members in a team)

### Assignment 2 - Simulate the System resources attack

The objective of this assignment is to make you aware of threats due to cyber attacks and mitigation schemes.

You need to simulate at least 2 system resources(cpu, memory, etc.) attacks using any tools such as hping3, tcpdump, wireshark, ettercap, snort, etc. You are free to use any tools and programming language.

#### **Caution Note:**

- Install Virtualbox on your machine and simulate on the VM.
- Don't use any of the institute resources.
- Don't attack any websites or public resources

#### What to submit?

Submit a report which should explain the setup for Injecting, Launching one or more attacks, detection method and Performance metrics such as CPU and memory usage.

Marks: 30 marks

Report: 15 marks

Demo: 15 marks

#### Note:

- 1. Penalty of 10% per day will be issued if the deadline is not met
- 2. If found copied, you will fetch 0 score.

#### **Submission Details:**

- 1. Please read the questions carefully and complete them.
- 2. Make a directory with the name <Your\_Roll\_Number> and copy your all program (source code) and output file to that folder.
- 3. Implement the solution using any cyber attacking tools and free to use any programming language.
- 4. Please take a screenshot of the output, name it with its question number and put it in the same folder.
- 5. Test well before submission. Follow some coding style uniformly. Provide proper comments in your code.
- 6. Submit only through moodle and well in advance. Any hiccups in the moodle/Internet at the last minute is never acceptable as an excuse for late submission. Submissions through email will be ignored.
- 7. Please attach a readme.txt file
- 8. Please zip your folder and submit to moodle within 14-Sept-2021 (23:55 PM)

#### Reference:

■ Hping3 Demo- Kali Linux - Ping Flood and SYN Flood Attack - DOS and DDOS - Explain...