

### **Following is a list of tasks to choose from:**

**A--** Write a program in a programming language of your choice (preferably in python) to sniff DNS traffic (live capture) and process it to dig out and save the following output to a file whenever an NXdomain packet is found

- 1- Response Code
- 2- The query
- 3- Authoritative name server
- 4- Transport protocol used and dst port
- 5- Find if the request is malicious

Also, explain the working of your code and how NXdomain hijacking works.

**Output:** *Working code, Demonstration*

-----

**B--** Analyze the provided pcap(s) and identify the attack type (if any) along with mitigation as per the analysis report template (attached as a separate file):

**Output:** *Analysis Report as per the given template, Demonstration*

-----

**C--** Setup DVWA on an Amazon EC2 instance using Amazon RDS for your database and:

- 1- Make the EC2 instance accessible only on port 80 and 22
- 2- Exploit all the 4 levels of at least 1 vulnerability

**Output:** *Pentest Report, Demonstration*