# Cyber Security Assignment Questions

## Question - 1

Imagine you are a cybersecurity analyst working for a large multinational corporation. One morning, your team receives an urgent report about a potential security breach in the company's network. The IT department has noticed unusual network activity originating from a particular IP address. Your team has been tasked with investigating this incident to determine if it poses a threat to the organization's network security.

**Assignment Question:**

1. Using the Python library Scapy, analyze the network packets associated with the suspicious IP address provided.

**Expected Procedure:**

1. A detailed explanation of how Scapy can be utilized to capture and dissect network packets.
2. A step-by-step breakdown of the process you followed to capture and analyze the network traffic.
3. Identification and interpretation of any suspicious or anomalous network behavior observed in the captured packets.
4. Recommendations for mitigating the identified security risks and securing the network against similar threats in the future.

**Expected Code:**

1. Write a python code to Network Packet Analysis with Scapy

## Question - 2

Imagine you are working as a cybersecurity analyst at a prestigious firm. Recently, your company has been experiencing a surge in cyber attacks, particularly through phishing emails and websites. These attacks have not only compromised sensitive information but also tarnished the reputation of the company.
In light of these events, your team has been tasked with developing a robust solution to detect and mitigate phishing websites effectively. Leveraging your expertise in Python programming and cybersecurity, your goal is to create a program that can accurately identify phishing websites based on various features and indicators.

**Assignment Task:**
Using the Python programming language, develop a phishing website detection system that analyzes website characteristics and determines the likelihood of it being a phishing site.

**Expected Procedure:**

1. Accept 2 web URL. One real and another one phishing.
2. Analyze the data from both the websites.
3. Identify the phishing site.

**Expected Code:**

1. Phishing Website Detection with Python