ASSIGNMENT 8

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

ANS:

NETWORK PACKET ANALYSIS

```
[ ]!pip install scapy

[ ] from scapy.all import *

[ ] def analyze packets(packet):
        if IP in packet:
            src_ip=packet[IP].src
            dst_ip=packet[IP].dst
            protocol=packet[IP].proto
            print(src_ip)
            print(dst_ip)
            print(protocol)
    if TCP in packet:
            src_port=packet[TCP].sport
            dst_port=packet[TCP].dport
            flags=packet[TCP].flags
            ## Firewall Rules
    elif UDP in packet:
        src_port=packet[UDP].sport
        dst_port=packet[UDP].dport
     elif ICMP in packet:
         icmp_type=packet[ICMP].type
        icmp_code=packet[ICMP].code
      print(src_port)
      print(dst_port)
```

```
        print(flags)

       p- data packet  PA/A-Ack

[   ]  sniff(prn=analyze_packets, filter="ip", count=10)
```

2. Phishing Website Detection with Python

ANS:

WEBSITE DETECTION

```
[ ]  !pip install pyzbar

Collecting pyzbar
  Downloading pyzbar-0.1.9-py2.py3-none-any.whl (32 kB)
Installing collected packages: pyzbar

Successfully installed pyzbar-0.1.9

[ ] !apt-get install -y libzbar0

[ ]  import cv2

from pyzbar.pyzbar import decode

[ ]  import requests

       from bs4 import BeautifulSoup #REST, SOUP

       from sklearn.feature_extraction.text  import  Tfidf Vectorizer

       from sklearn.ensemble import Random Forest Classifier

      from sklearn.model_selection import train_test_split

      from sklearn.metrics import accuracy_score

[   ] def extract_url_qr_code(image_path):

          image=cv2.imread(image_path)

          decoded_objects=decode(image)

         if decoded_objects:

        url = decoded_objects[0].data.decode('utf-8')

        return url

         else:
```

```
print("Data cannot be extracted. Possible Phishing")

return None
```

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