ASSIGNMENT NO: 03

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Problem Statement:

Develop a Python program for Log Capturing using a wireless router. Perform suitable event correlation and analysis of network traffic.

Objectives:

1. To create analysis on Log Captured through wireless router.

Theory:

1) Fetch logs from Wireless router.

2) Load the dataset into a python program.

3) Create a function to return the Dataset for the required LIP,DIP & Ports.

4) Search for the given input and display all the values of the matching row.

Code:

```
import pandas as pd

col_list = ["LIP", "DIP", "PN"]
file = pd.read_csv("./logs1.csv", usecols=col_list)


def source(ip1, file):
    selec = pd.DataFrame(file.loc[file["LIP"] == ip1])
    return selec
```

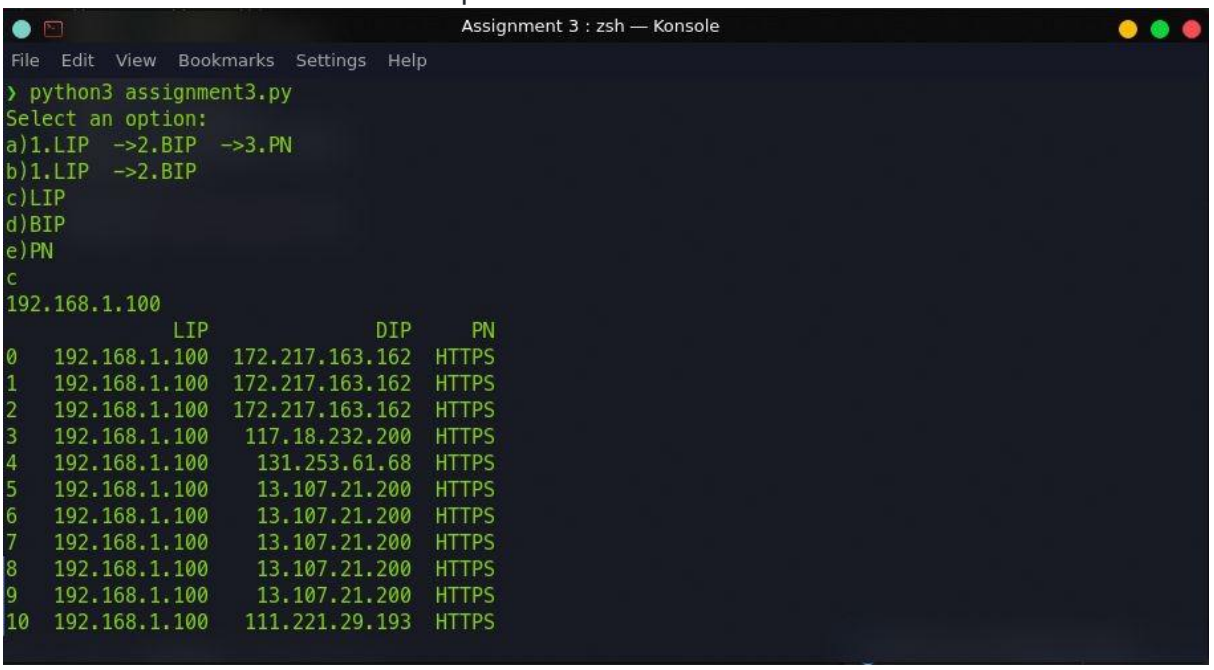
```
def des(ip1, file):
    selec = pd.DataFrame(file.loc[file["DIP"] == ip1])
```

```
    return selec


def proto(ip1, file):
    selec = pd.DataFrame(file.loc[file["PN"] == ip1])
    return selec


print("Select an option:") print("a)1.LIP
->2.BIP ->3.PN")
print("b)1.LIP ->2.BIP")
print("c)LIP")
print("d)BIP")
print("e)PN") option
= str(input()) selec
= file
if option == "a": sip
    = str(input()) dip
    = str(input()) pip
    = str(input())
    selec = source(sip, selec)
    selec = des(dip, selec)
    selec = proto(pip, selec)
    print(selec)
elif option == "b":
    sip = str(input())
    dip = str(input())
    selec = source(sip, selec)
    selec = des(dip, selec)
    print(selec)
elif option == "c":
    sip = str(input())
    selec = source(sip, selec)
    print(selec)
elif option == "d":
    dip = str(input())
    selec = des(dip, selec)
    print(selec)
elif option == "e":
    pip = str(input())
    selec = proto(pip, selec)
    print(selec)
else:
    print("Invalid Option!")
```

Dataset: Wireless Router Captured Dataset **Input:**

Local IP and/or Destination IP and/or Ports **Output:**

Matched Dataset in CSV to the Input



Platform: Ubuntu 20.04

Programming Language Used: Python.

Conclusion: Hence, we analyzed the networking data.