

ASSIGNMENT 5

Problem Statement: Write a program for Log Capturing and Event Correlation.

OUTPUTS:

```
nikhil1771@nikhil1771:~$ cd Desktop/CSDF/
nikhil1771@nikhil1771:~/Desktop/CSDF$ gcc Logging.c && sudo ./a.out
Logging.c: In function 'main':
Logging.c:54:2: warning: implicit declaration of function 'close'; did you mean
'pclose'? [-Wimplicit-function-declaration]
   54 |     close(sock_raw);
      |     ^~~~~
      |     pclose
[sudo] password for nikhil1771:
Starting...
TCP : 746  UDP : 0   ICMP : 0   IGMP : 0   Others : 0   Total : 745
```

*****TCP Packet*****

IP Header

```
| -IP Version      : 4
| -IP Header Length : 5 DWORDS or 20 Bytes
| -Type Of Service : 0
| -IP Total Length : 44 Bytes(Size of Packet)
| -Identification : 374
| -TTL             : 64
| -Protocol        : 6
| -Checksum        : 28042
| -Source IP       : 34.107.221.82
| -Destination IP  : 10.0.2.15
```

TCP Header

```
| -Source Port      : 80
| -Destination Port : 56100
| -Sequence Number  : 39296001
| -Acknowledge Number : 1728128873
| -Header Length    : 6 DWORDS or 24 BYTES
| -Urgent Flag      : 0
| -Acknowledgement Flag : 1
```

DATA Dump

IP Header

```
45 00 00 2C 01 76 00 00 40 06 6D 8A 22 6B DD 52    E...v...@.m."k.R
0A 00 02 0F                                         ....
```

TCP Header

```
00 50 DB 24 02 57 9C 01 67 01 27 69 60 12 FF FF    .P$.W..g.'i`...
84 12 00 00 02 04 05 B4                             .....
```

Data Payload

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