**3.Network packet Analyzer(Task-3)**

import os

import time

from prettytable import PrettyTable, TableStyle

import psutil

size = ['bytes', 'KB', 'MB', 'GB', 'TB']

def getSize(bytes):

    for unit in size:

        if bytes < 1024:

            return f"{bytes:.1f}{unit}"

        bytes /= 1024

def printData():

    card = PrettyTable()

    card.set\_style(TableStyle.PLAIN\_COLUMNS)

    card.field\_names = ["Received", "Receiving", "Sent", "Sending"]

    card.add\_row([

        f"{getSize(netStats2.bytes\_recv)}",

        f"{getSize(downloadStat)}/s",

        f"{getSize(netStats2.bytes\_sent)}",

        f"{getSize(uploadStat)}/s"

    ])

    print(card)

netStats1 = psutil.net\_io\_counters()

dataSent = netStats1.bytes\_sent

dataRecv = netStats1.bytes\_recv

try:

    while True:

        time.sleep(1)

        os.system('cls')  # Use 'clear' for Linux/MacOS

        netStats2 = psutil.net\_io\_counters()

        uploadStat = netStats2.bytes\_sent - dataSent

        downloadStat = netStats2.bytes\_recv - dataRecv

        printData()

        dataSent = netStats2.bytes\_sent

        dataRecv = netStats2.bytes\_recv

except KeyboardInterrupt:

    print("\nProgram terminated by user.")