

# COMP 7003

## Assignment 2

### Report

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# Purpose

This program grabs a specified number of packets from a specified from all global network interfaces, or a specified network interface and displays their contents in both hex form and decimal format with possible additional formatting to add dots or colons for octets.

# Requirements

| Task  | Status            |
|---|-------------------|
| Support Ethernet, IPv4, ICMP, TCP, UDP, and DNS   | Fully implemented |
| produce a hex dump of each packet's raw data.   | Fully implemented |
| parse and display relevant fields   | Fully implemented |
| Collect and analyze multiple packets from each supported protocol to verify that your program works correctly | Fully implemented |

# Platforms

dc\_shell has been tested on:

- macOS 15
- Arch Linux

# Language

- Python 3.13

# Documents

- Design
- Testing
- User Guide