* Graph
* LargeTraces
* Multitraces
* Github

# Graph

Trial and error, tried to get other libraries like graphviz/tried multiple things. Will adjust/fix later.

## Check causal relationship

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**A computer screen shot of code

Description automatically generated**

## See any node’s relations/children.

A black background with white text

Description automatically generated

EXAMPLE: Initial Node 0 (0 : cpu0:cache0:wt:req) ✅

A screen shot of a computer

Description automatically generated

EXAMPLE: Middle Node 7 : cache1:cache0:wt:req✅

A computer screen shot of a computer code

Description automatically generated

EXAMPLE: Terminating Node 25 : cache0:cpu0:wt:resp✅

A black screen with white text

Description automatically generated

## Graph

A network of connected lines and dots

Description automatically generated

A close-up of a network

Description automatically generated

No incoming messages to initial nodes, no outgoing arrows from terminating nodes. ✅

Tried using graphviz: (too messy, but when zoomed in the image is clearer)

A black and white speckled background

Description automatically generated

A white background with black lines

Description automatically generated

Or

A network of blue dots and lines

Description automatically generated

Groups from message file:

A black background with white numbers

Description automatically generated

# Reading in Large Traces

A screenshot of a computer

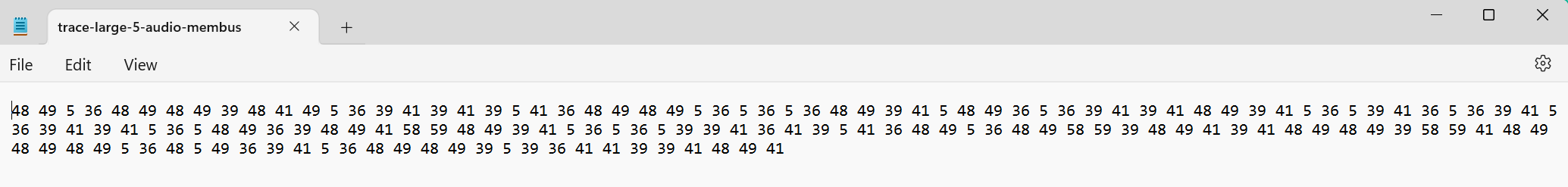
Description automatically generated

**Trace-large-5 example**

A screenshot of a computer

Description automatically generated

**Audio-membus Example: should have these numbers ('audio', 'membus', (5, 36, 39, 41, 48, 49, 58, 59))**



**Verification (ran a python function to check all unique numbers)** **✅**

36, 5, 39, 41, 48, 49, 58, 59

# Reading in Multiple Traces

## multipleTraces-synthetic (has 6 traces)

A white background with black numbers and numbers

Description automatically generated

And each trace has

A screenshot of a computer

Description automatically generated

## multipleTraces-syntheticSmall (has 3)

A white background with black text

Description automatically generated

## multipleTraces-syntheticLarge (has 3)

A black text on a white background

Description automatically generated

## multipleTraces-RubelMultiTrace (has 100)

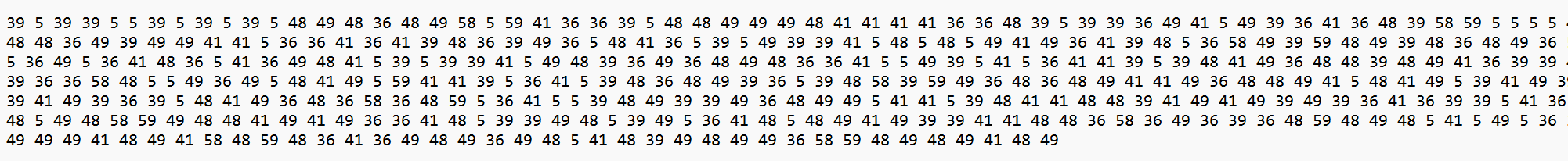
A screenshot of a computer

Description automatically generated

**Example for trace 63**

**A screenshot of a computer

Description automatically generated**

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