Lab 08 - Mux and Demux

In this lab, you’ve learned about how the physics of semiconductors and circuits induce delay in the outputs, and the consequences thereof. You have also implemented a circuit that has a lot of delay and seen its effects on the simulation.

# Rubric

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| --- | --- | --- |
| **Item** | **Description** | **Value** |
| Summary Answers | Your writings about what you learned in this lab. | 25% |
| Question 1 | Your answers to the question | 25% |
| Question 2 | Your answers to the question | 25% |
| Question 3 | Your answers to the question | 25% |

# Lab Summary

We learned how to implement a multiplexer and a demultiplexer in Verilog

# Lab Questions

## 1 - In plain English describe the function and use of a multiplexer.

A multiplexer (MUX) is something that takes multiple inputs but only lets one output pass through. Like a TV remote.

## 2 - In plain English describe the function and use of a demultiplexer.

A demultiplexer (DEMUX) is something that takes one input but directs that one input to one of the many outputs it has. Like selecting a mode of AC in a car.

## 3 - What other uses might these circuits have? (Think Shannon’s)

These circuits are compact, efficient and allow for easier troubleshooting.

# Code Submission

Upload a .zip of all your code or a public repository on GitHub.