# University of Virginia
## Digital Logic Design
## BONUS Studio Assignment

*This assignment is to be completed without any aid from anyone other than the teaching staff for this class. You may use only the class text, other materials provided to you by the teaching staff for this class, and your own class notes to complete this assignment. You must not offer or provide aid to others taking this class. Submission of any part of this assignment represents your affirmation that you have complied with these requirements.*

## Objective

This studio assignment will give you the opportunity to reverse engineer a sequential circuit.

## Problem Description

Observe the Logisim circuit called "bonus studio". Using the reverse engineering process covered in class, determine the state diagram that the circuit implements.

## Pre-Work

1. Derive the excitation functions, construct the state table and draw the state diagram.

## In Studio

Bring your completed and documented reverse engineering procedure to the studio to be reviewed by your studio instructor. Be prepared to answer questions about your process and make suggested changes to demonstrate understanding.

## Grading Scale

A complete and correct solution accompanied by a clear and concise explanation grants the student one free drop studio.