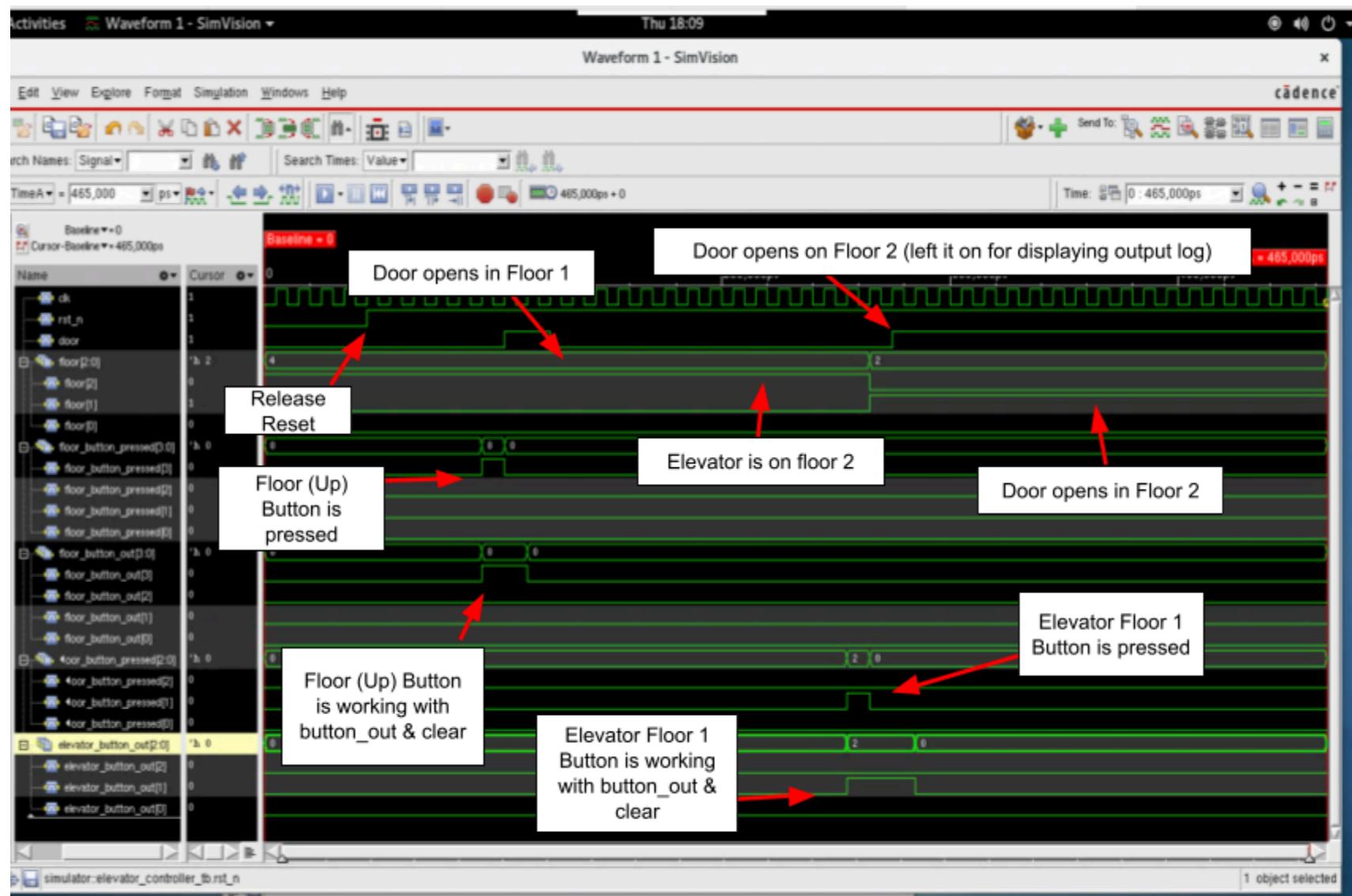
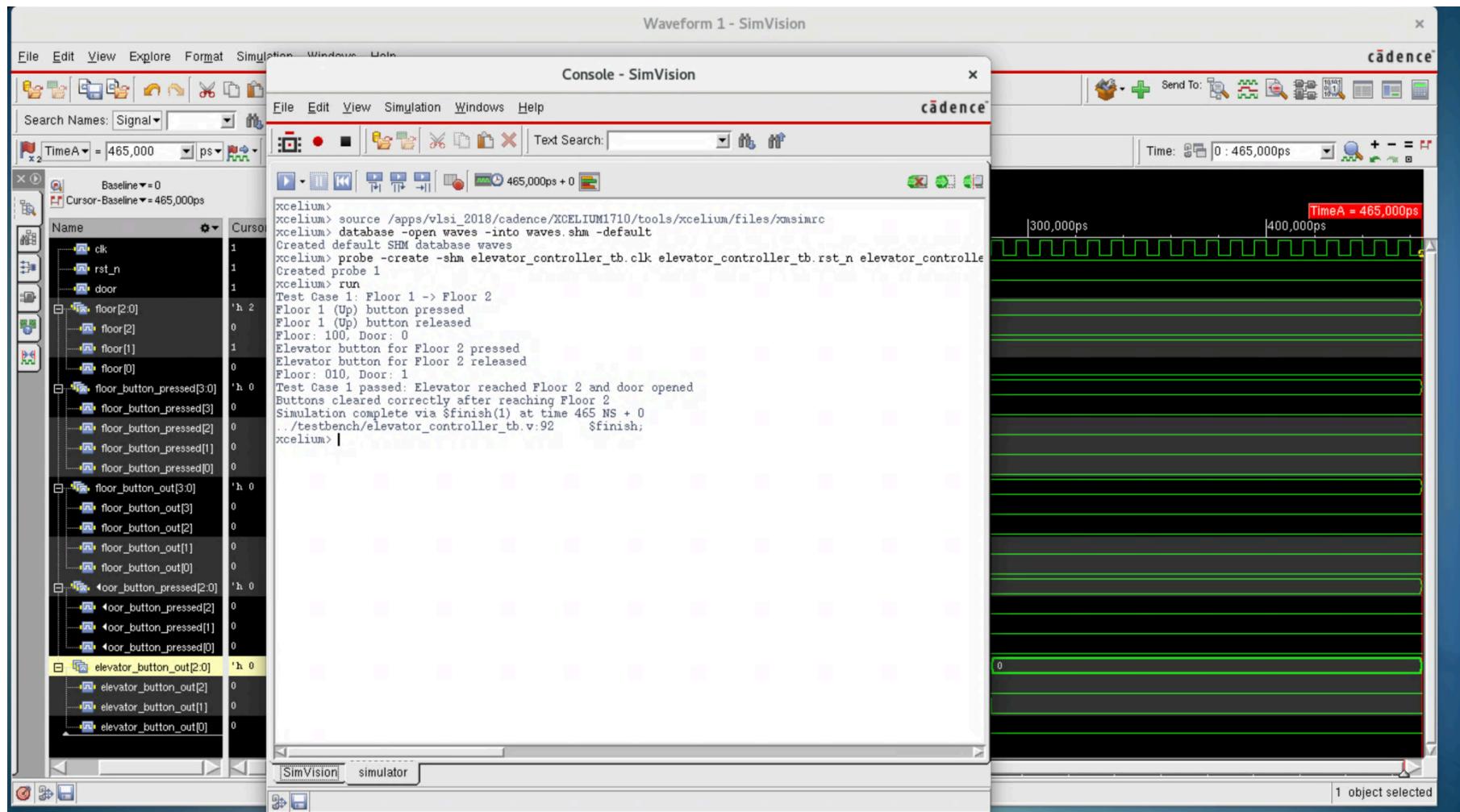


Victor Nin
ECE 6213
Project 3: Elevator FSM

Test Case 1 (Floor 1 → Floor 2):

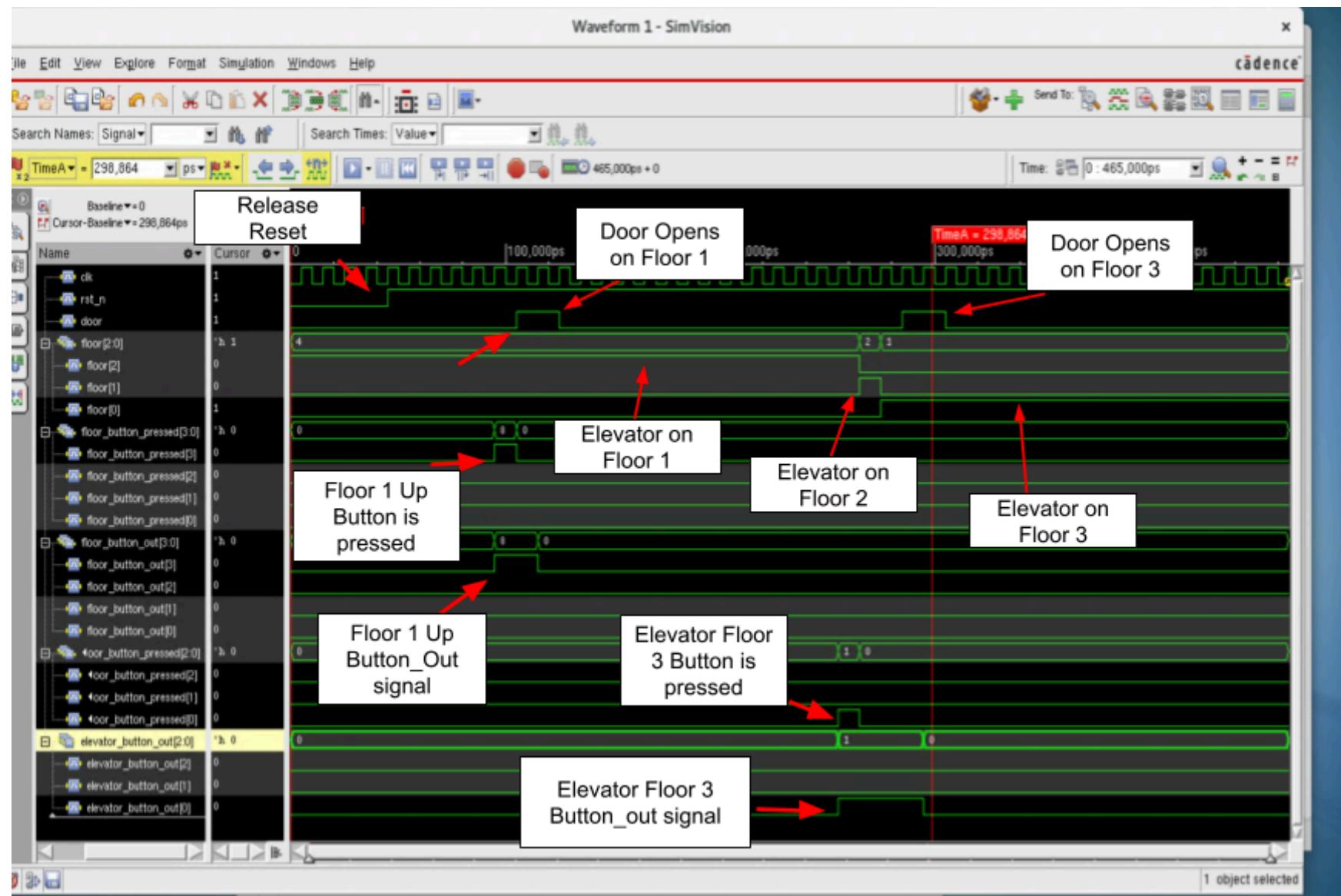


Waveform Simulation



Log Console

Test Case 2 (Floor 1 → Floor 3):



Waveform Simulation

Activities Console - SimVision

Console - SimVision

File Edit View Explore Format Simulation Windows Help

Save

Text Search:

xcelium>
xcelium> source /apps/vlsi_2018/cadence/XCELLIUM1710/tools/xcelium/files/xmsimrc
xcelium> database -open waves -into waves.shm -default
Created default SHM database waves
xcelium> probe -create -shm elevator_controller_tb.clk elevator_controller_tb.door elevator_controller_tb.floor
Created probe 1
xcelium> run
Test Case 1: Floor 1 -> Floor 3
Time: 45000 | Floor: 100 | Door: 0
Floor 1 (Up) button pressed
Floor 1 (Up) button released
Time: 105000 | Floor: 100 | Door: 1
Time: 125000 | Floor: 100 | Door: 0
Floor: 100, Door: 0
Elevator button for Floor 3 pressed
Elevator button for Floor 3 released
Time: 265000 | Floor: 010 | Door: 0
Time: 275000 | Floor: 001 | Door: 0
Time: 285000 | Floor: 001 | Door: 1
Time: 305000 | Floor: 001 | Door: 0
Floor: 001, Door: 0
Buttons cleared correctly after reaching Floor 3
Simulation complete via \$finish(1) at time 515 NS + 0
../testbench/elevator_controller_tb.v:90 \$finish;
xcelium>

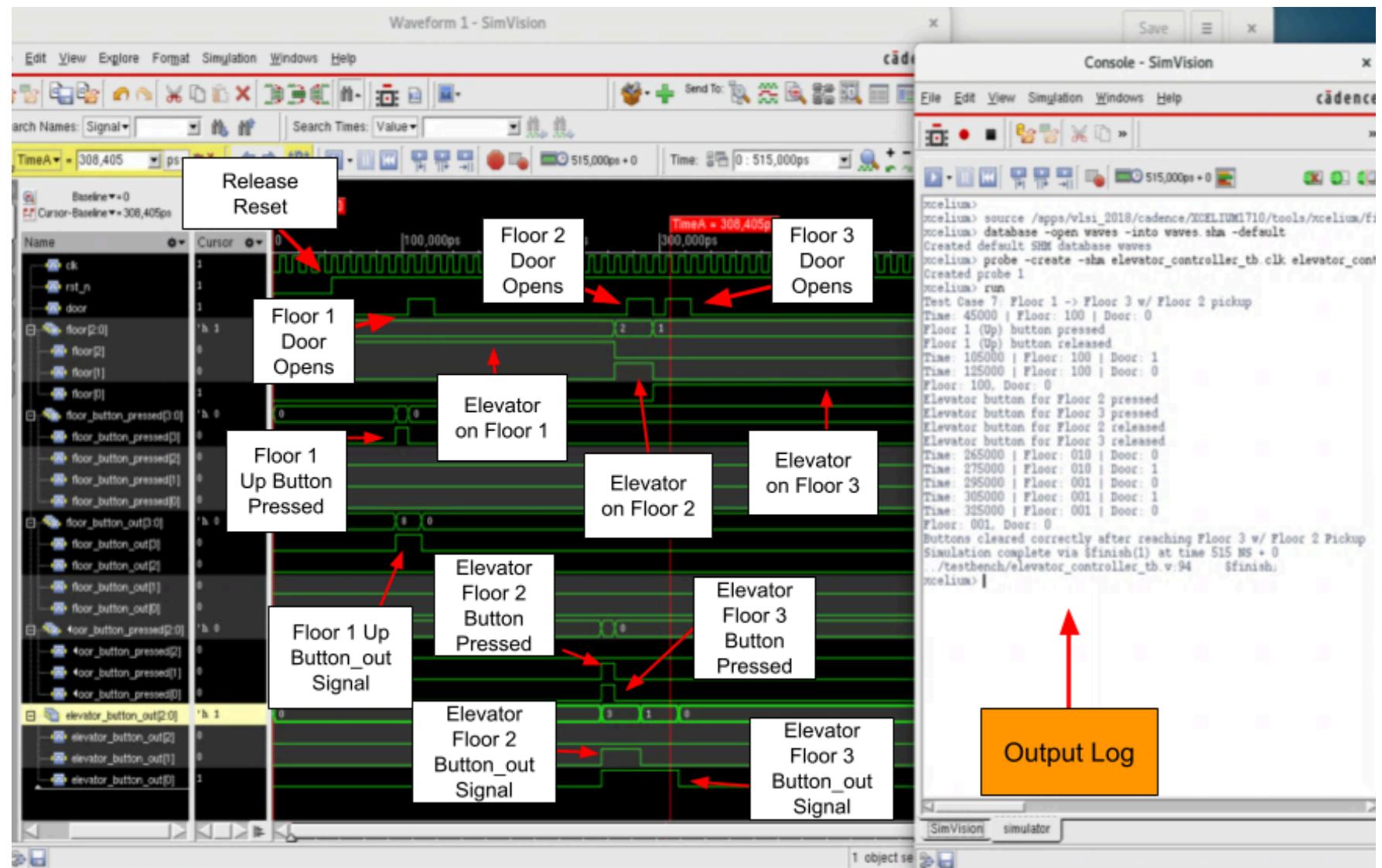
Tab Width: 8 ▾ Ln 82, Col 1 ▾ INS

SimVision simulator

The screenshot shows the Cadence Xcelium simulation environment. The main window is titled 'Console - SimVision'. It displays a command-line interface with simulation logs. The logs show a test case where an elevator moves from floor 1 to floor 3. The logs include timestamp, floor, and door status information, along with button press and release events. The simulation concludes with a '\$finish' command at time 515 NS. The interface includes a toolbar, menu bars for File, Edit, View, Explore, Format, Simulation, Windows, and Help, and various tool buttons on the left side. The bottom of the window shows tabs for 'SimVision' and 'simulator'.

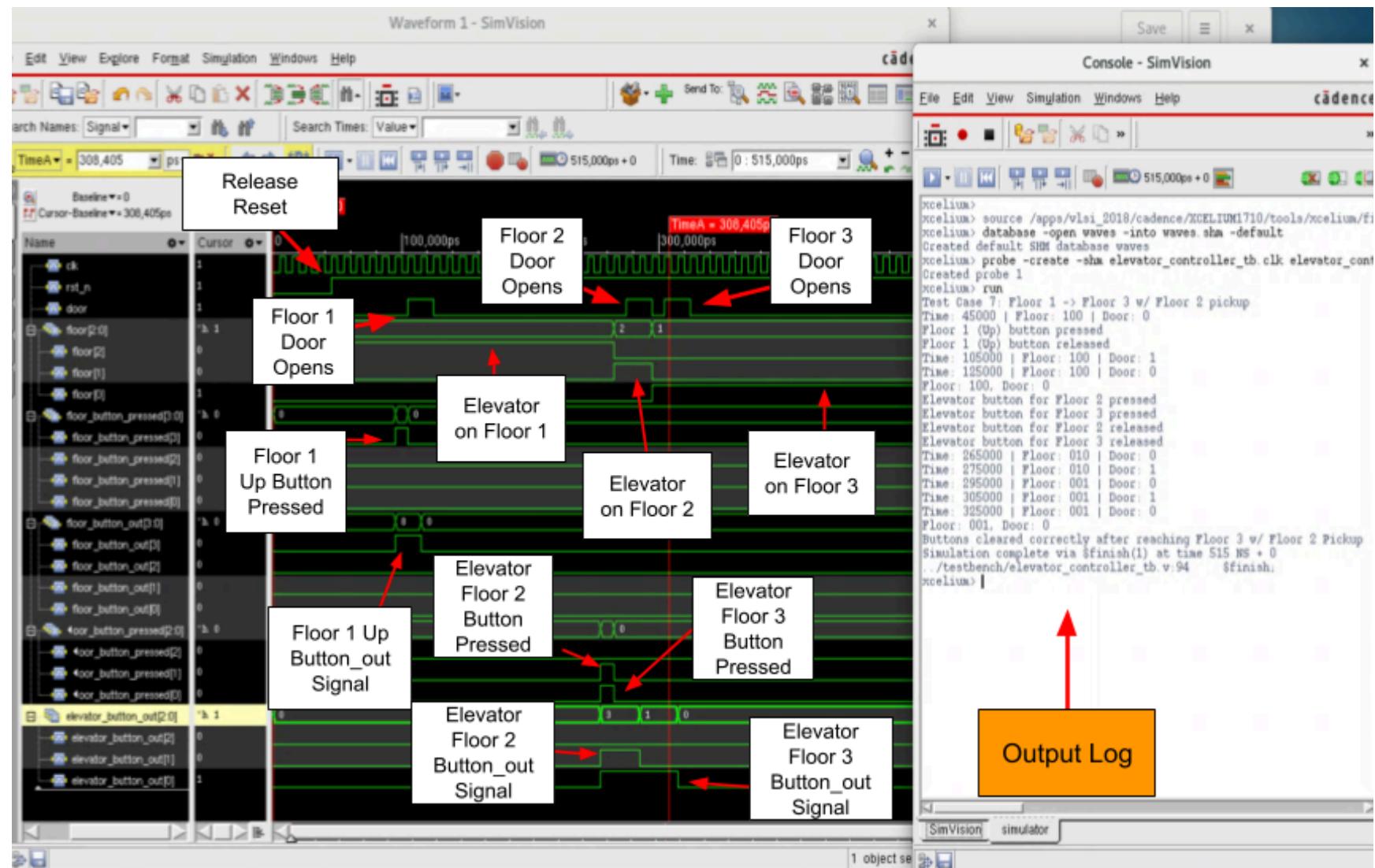
Output Log Console

Test Case 3 (Floor 1 → Floor 2 → Floor 3):



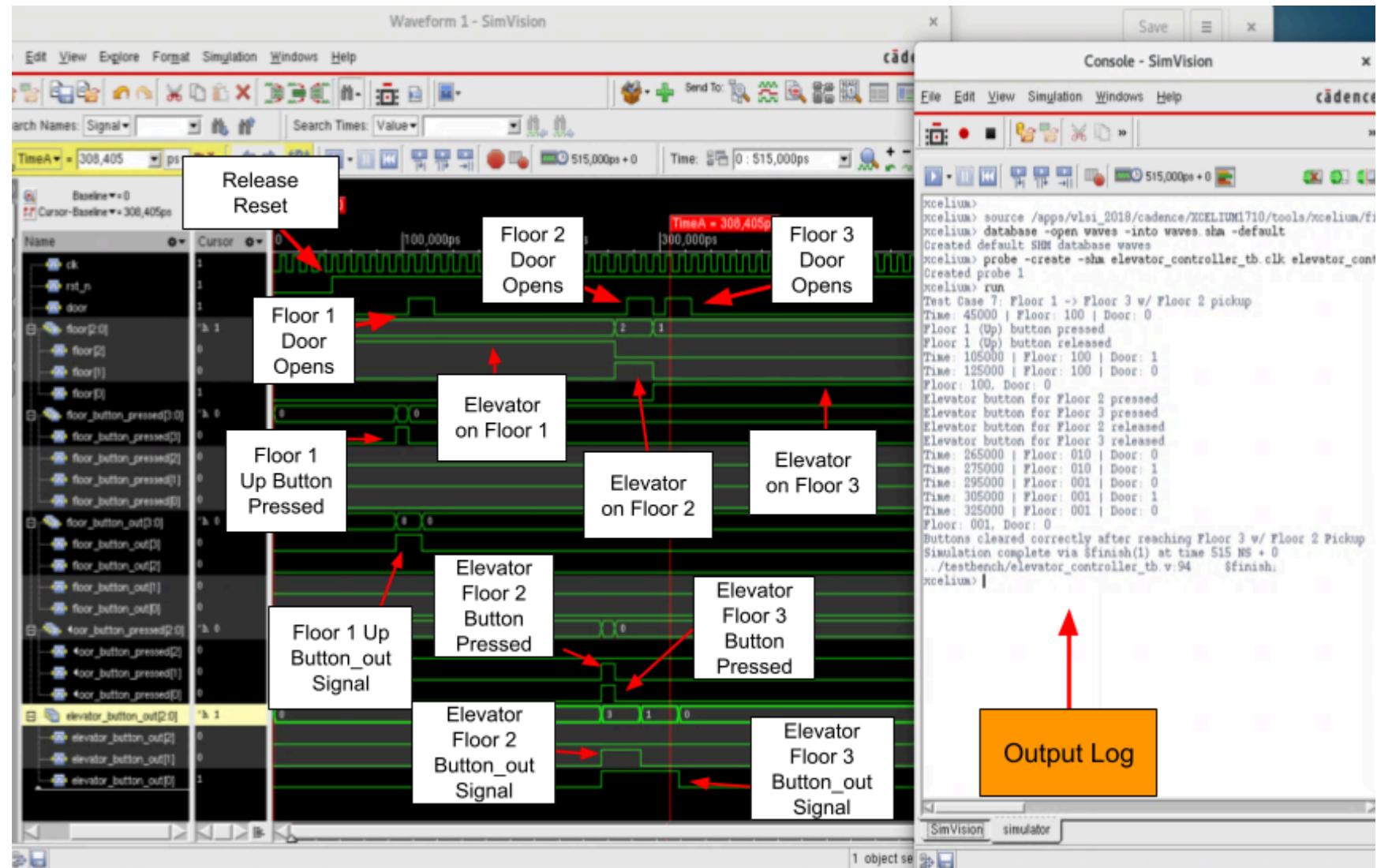
Waveform Simulation & Output Log

Test Case 4 (Floor 2 → Floor 1):



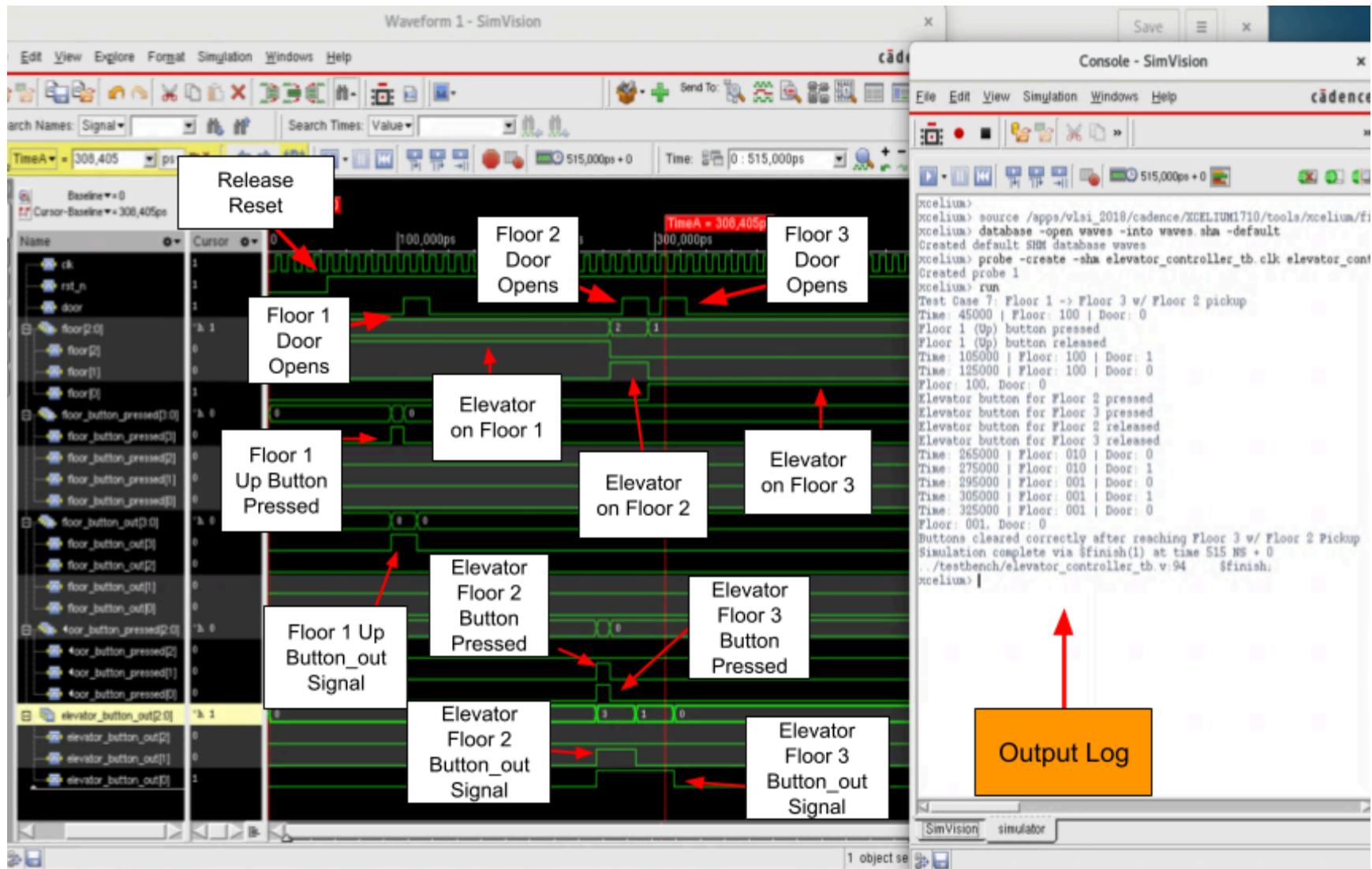
Waveform Simulation & Output Log

Test Case 5 (Floor 3 → Floor 2):



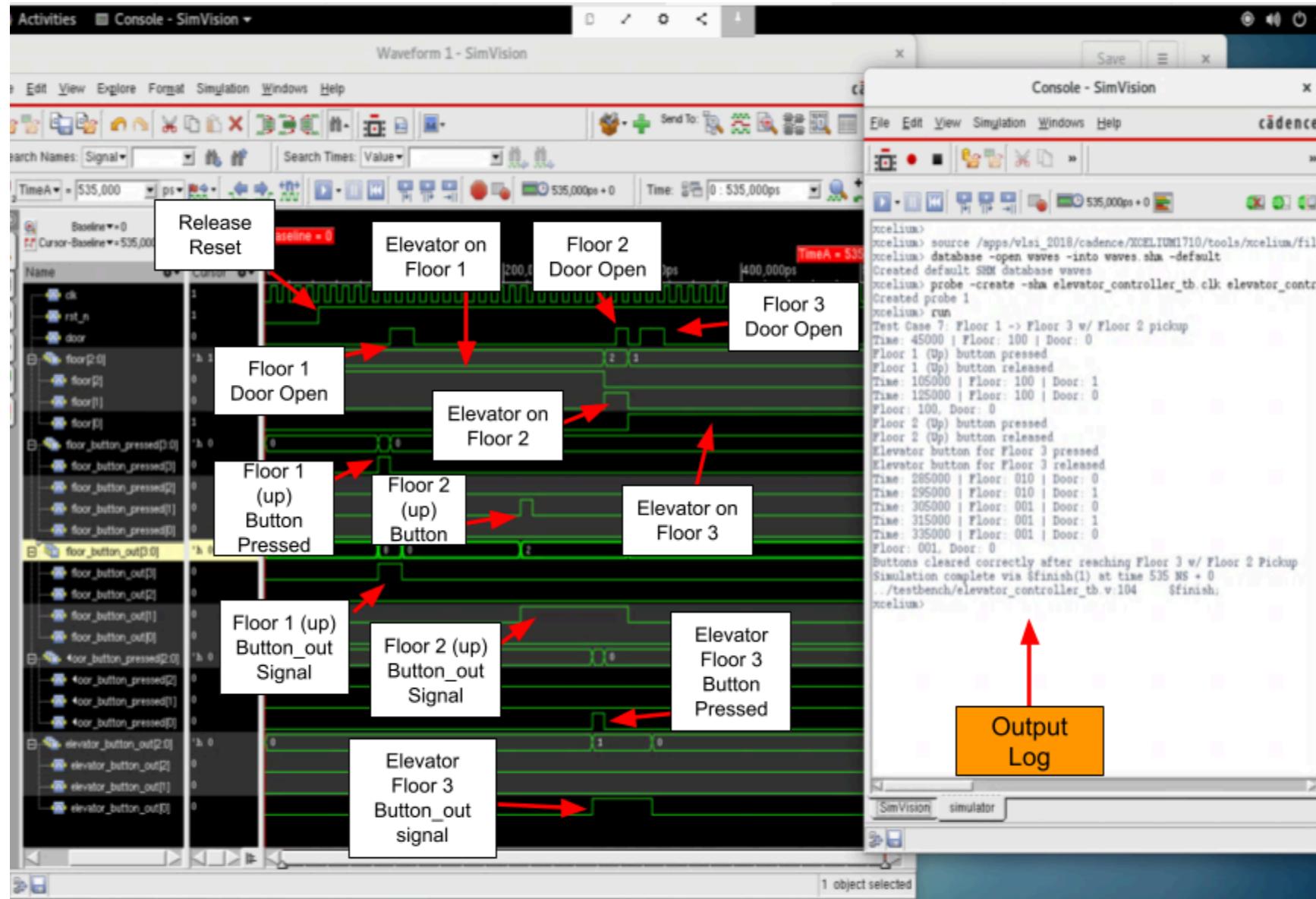
Waveform Simulation & Output Log

Test Case 6 (Floor 3 → Floor 1):



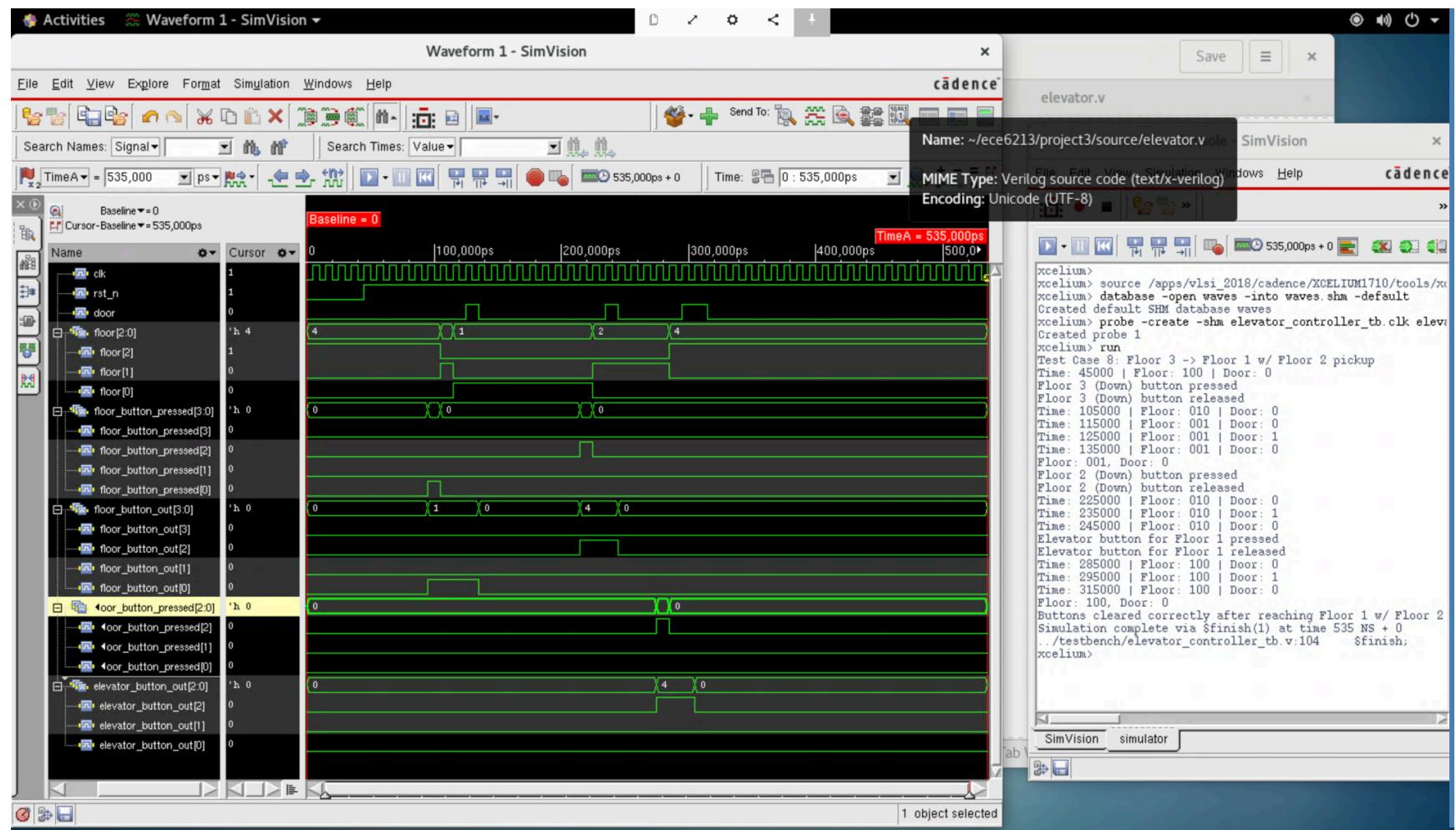
Waveform Simulation & Output Log

Test Case 7 (Floor1 → Floor3 w/ Pickup on Floor2):



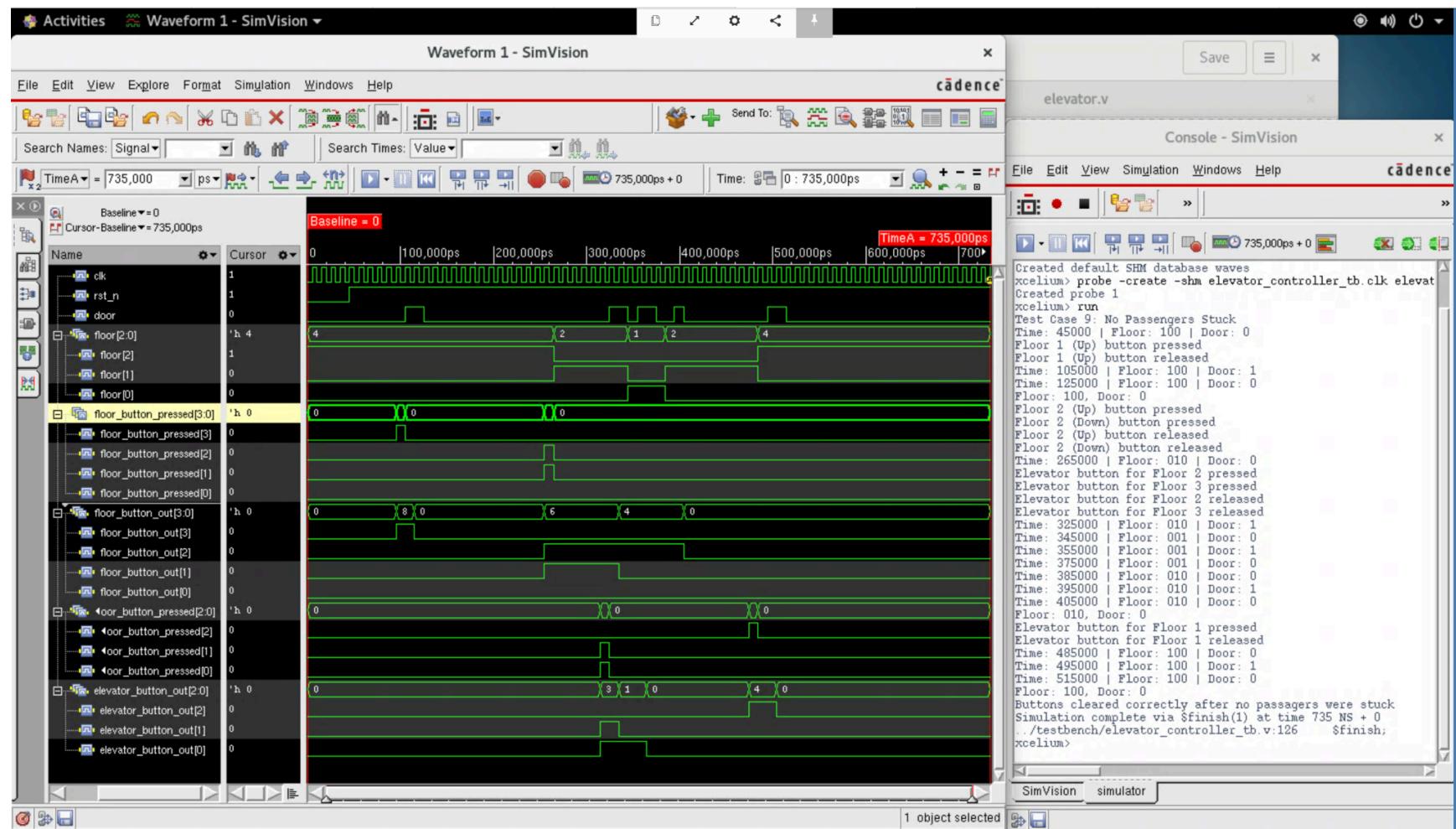
Waveform Simulation & Output Log

Test Case 8 (Floor3 → Floor1 w/ Pickup on Floor2):



Waveform Simulation & Output Log

Test Case 4,5,6, and 9 (No Passengers Stuck):



Waveform Simulation & Output Log