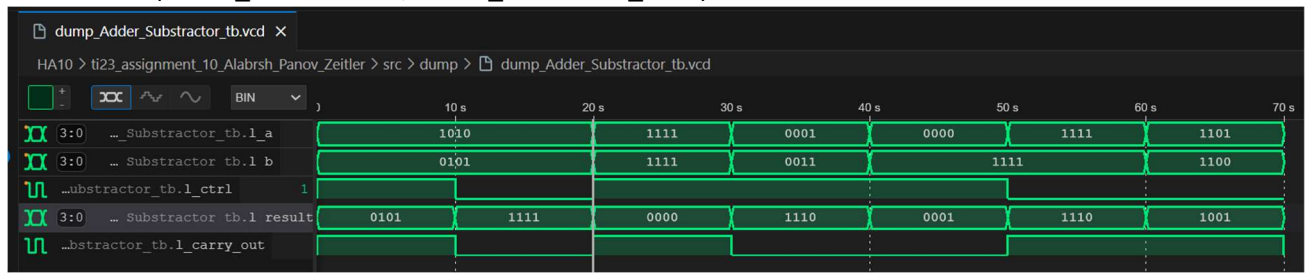
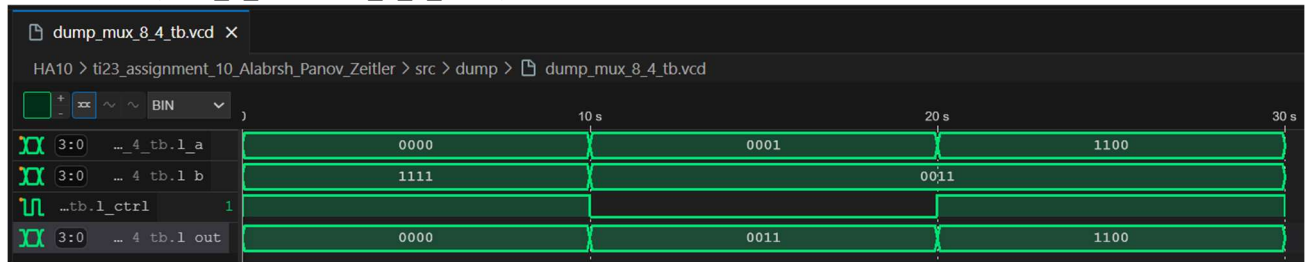


## ti23 assignment 10 Alabrsh Panov Zeitler

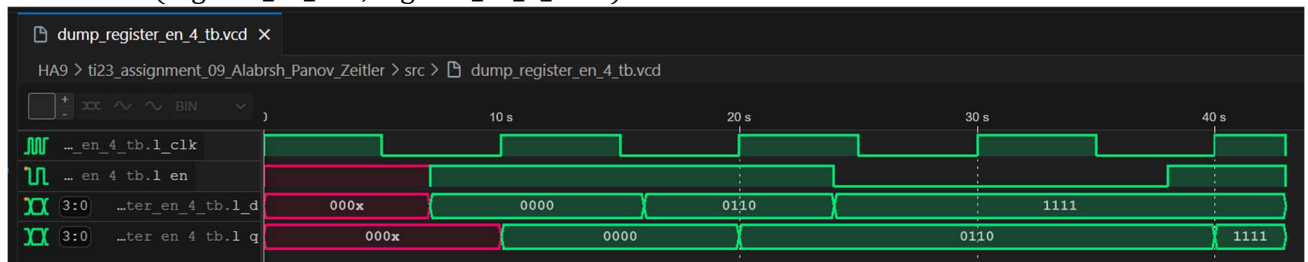
- 1a) Implemented accumulator-related modules with testbench and waveform:  
→ siehe src (Adder\_Subtractor.sv, Adder\_Subtractor\_tb.sv)



→ siehe src (mux\_8\_4.sv, mux\_8\_4\_tb.sv)

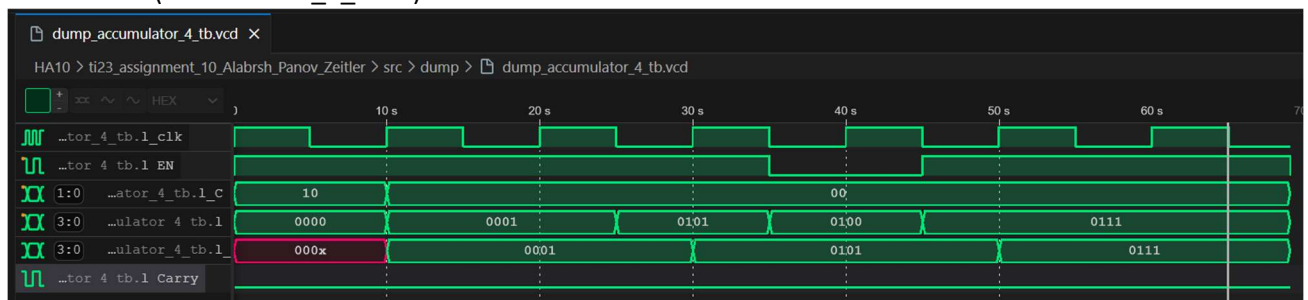


→ siehe src (register\_en\_4.sv, register\_en\_4\_tb.sv)



- 1b) Implemented basic 4bit accumulator:  
→ siehe src (accumulator\_4.sv)

- 1c) Validated correctness of module by testing it with suitable testbench and shown in waveform:  
→ siehe src (accumulator\_4\_tb.sv)



- 1d) Finished top-level module by using provided template and programmed FPGA of a DE10-Lite board:  
→ siehe src (accumulator\_basic\_de10\_lite.sv)

- 1e) Explained and illustrated programmed FPGA to teaching personal. Included Scan of tailored coversheet

### Aufgabenbearbeitung:

Aufgabe 1a,b,c,d → Christian, Cora, Rahaf

Aufgabe 1e → Christian, Cora