

HW4a

1. Design a single digit decimal adder with input $A[3:0]$, $B[3:0]$, $C_{in}(ci)$, and output $S[3:0]$ and $C_{out}(co)$.
 - (a) Provide a logic function or logic diagram
 - (b) Verilog RTL representation with Verification.
2. Design a 3-to-8-line decoder with enable (input $in[2:0]$, enable en and output $d[7:0]$).
 - (a) Provide a logic function or logic diagram
 - (b) Verilog RTL representation with verification.