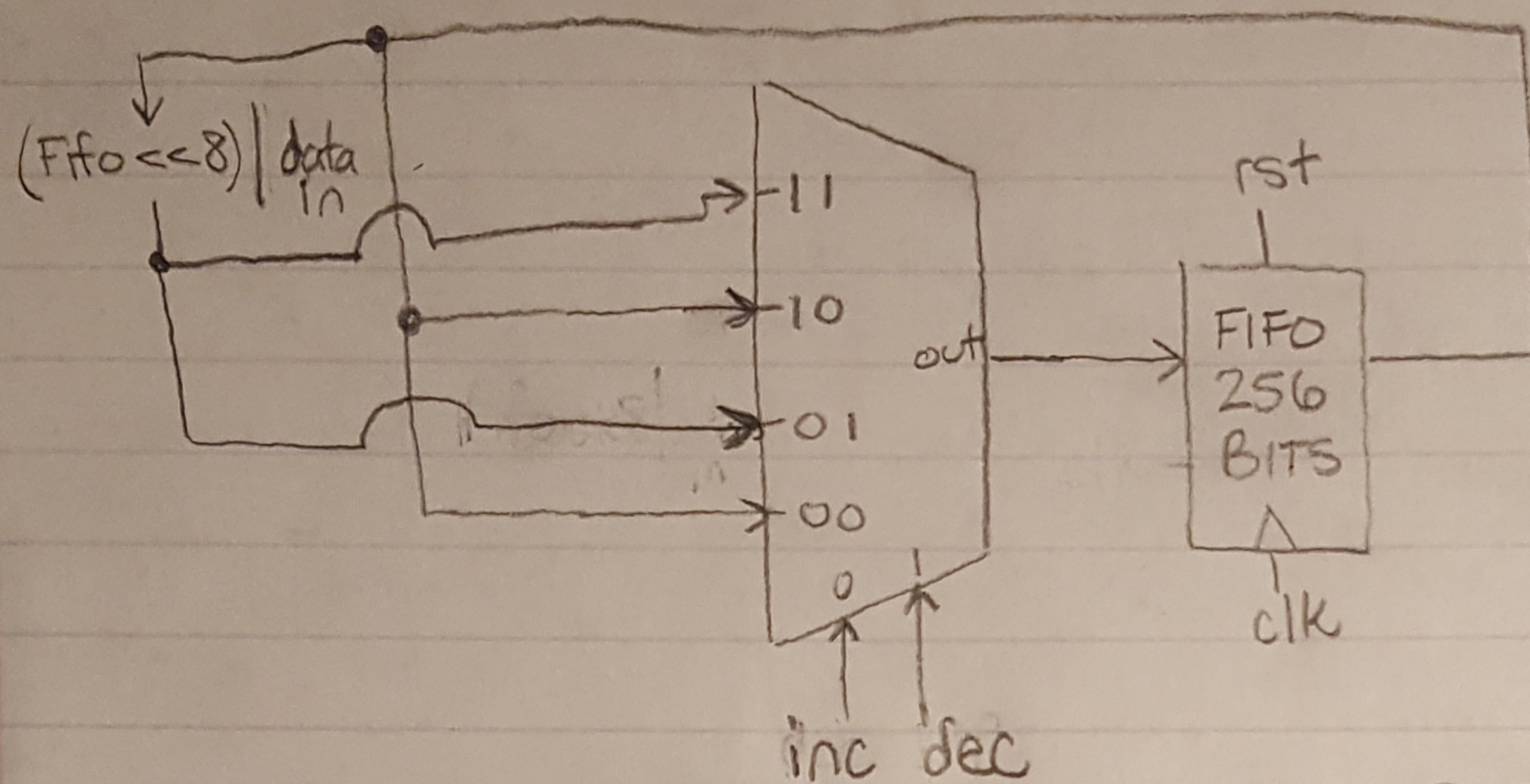
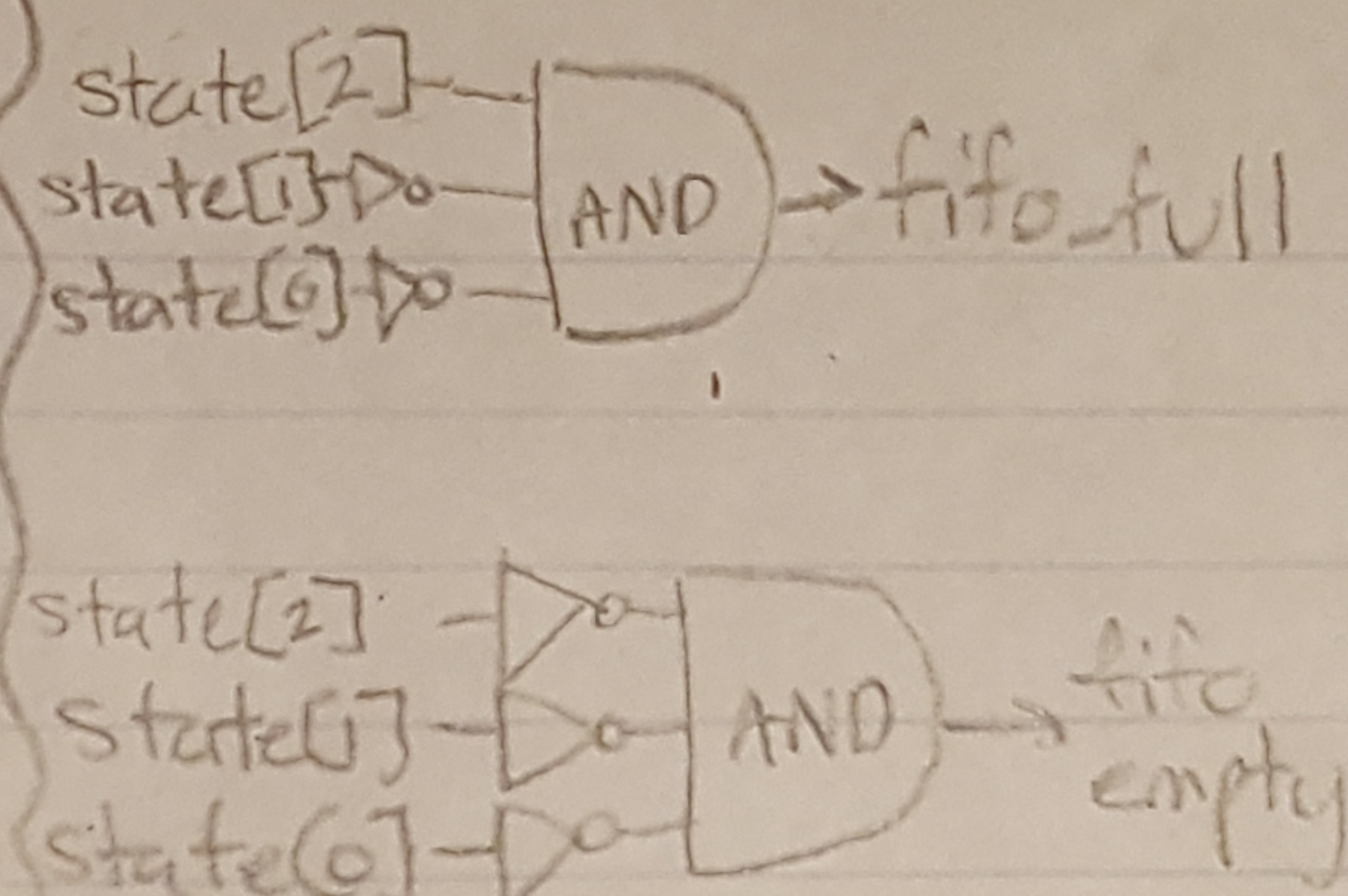


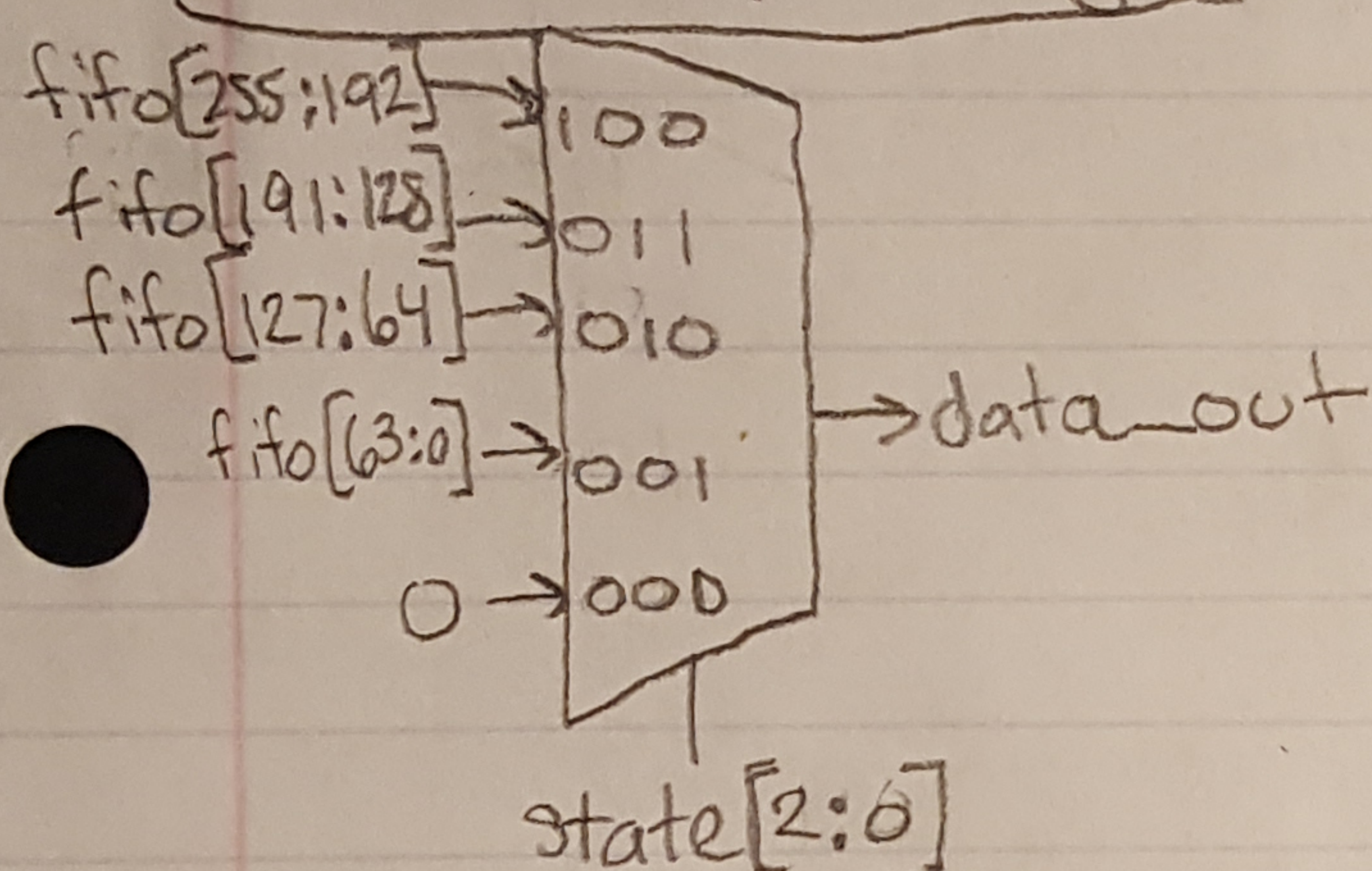
fifo push/pop logic



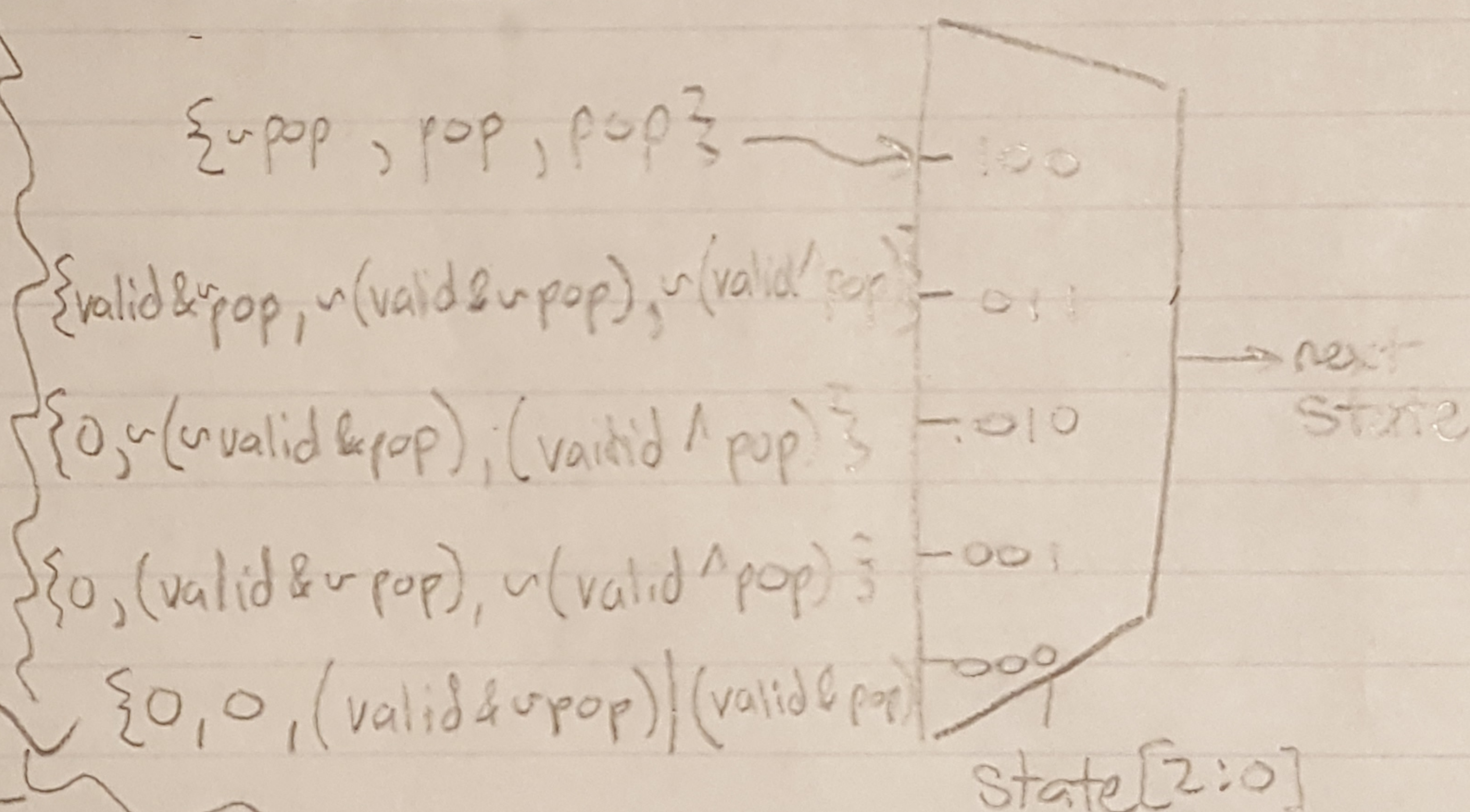
full/empty logic



fifo output logic



next state logic



inc/dec logic for fifo shifting

