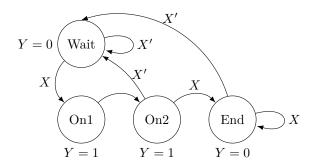
## VE270 Homework 7

#### Liu Yihao 515370910207

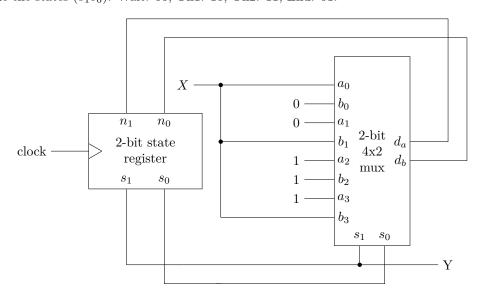
#### Problem 1.

Inputs: X; Outputs: Y

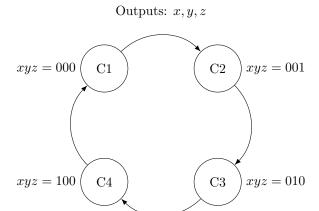


## Problem 2.

Encode the states  $(s_1s_0)$ : Wait: 00, On1: 10, On2: 11, End: 01.

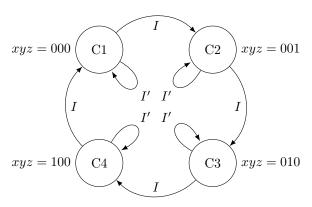


## Problem 3.



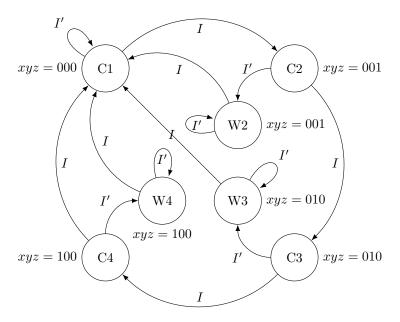
## Problem 4.

Inputs: I; Outputs: x, y, z



## Problem 5.

Inputs: I; Outputs: x, y, z



## Problem 6.

Encode the states  $(s_1s_0)$ : Wait: 00, On1: 10, On2: 11, End: 01.

$$\begin{array}{c|cccc}
 & n_1 & n_0 \\
\hline
 & 3\text{-bit state} \\
 & \text{register} \\
 & s_2 & s_1 & s_0
\end{array}$$

# Problem 7.

Inputs: B; Outputs:  $s_1, s_0$ 

