1. The following shift register circuit implements a counter entitled the self-correcting Johnson counter. Draw the state diagram for state variables QD, QC, QB, and QA that include all state transitions.

2. Create a ROM that contains your full name as its content. Submit your test circuit for this ROM by email to Mark.A.Yoder@Rose-Hulman.edu. The grade for this problem will be in binary (0 or 1) and will be given to the name in the ROM you submitted.