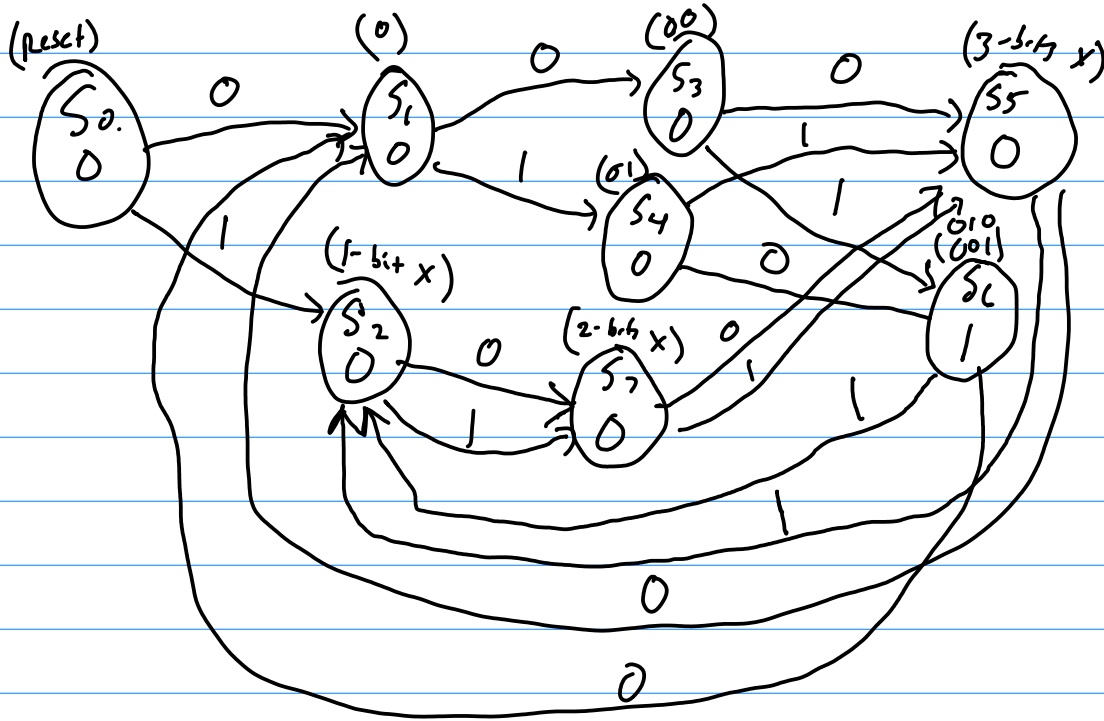


[Example

moore

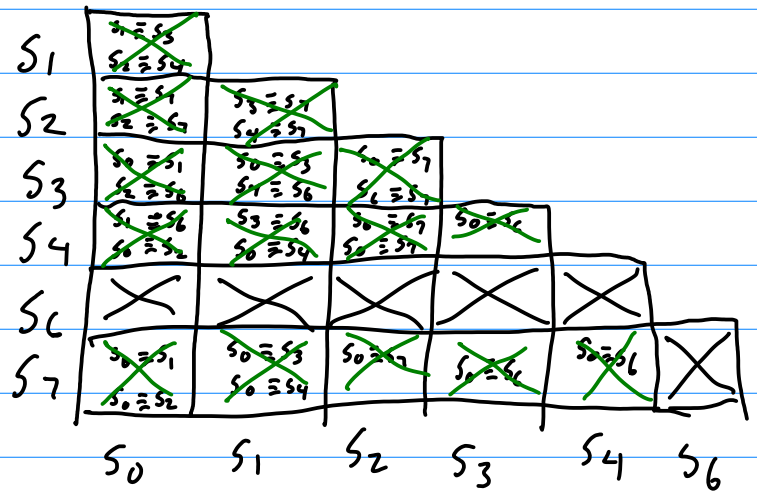
Pass if sequence is $\begin{cases} 001 \\ 010 \end{cases}$

No overlapping -
reset after every 3rd bit



| Ps | Ns | | z |
|--------------------------|--|--|---|
| | X=0 | X=1 | |
| S ₀ | S ₁ | S ₂ | 0 |
| S ₁ | S ₃ | S ₄ | 0 |
| S ₂ | S ₇ | S ₇ | 0 |
| S ₃ | S₅^{S₀} | S ₆ | 0 |
| S ₄ | S ₆ | S₅^{S₀} | 0 |
| S₅ | S₁ | S₂ | 0 |
| S ₆ | S ₁ | S ₂ | 1 |
| S ₇ | S₅^{S₀} | S₅^{S₀} | 0 |

S₆ ≡ S₅

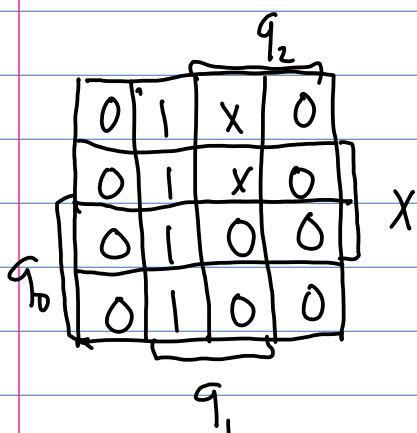
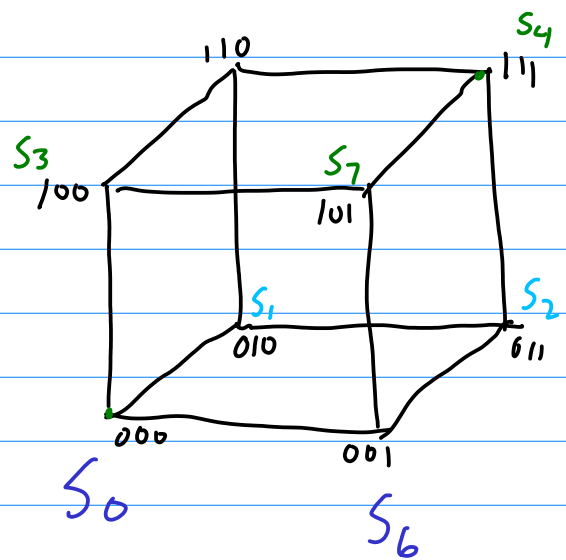


| PS | NS | NS | | Z |
|-----|----------------|----------------|----------------|---|
| | | X=0 | X=1 | |
| 000 | S ₀ | S ₁ | S ₂ | 0 |
| 010 | S ₁ | S ₃ | S ₄ | 0 |
| 011 | S ₂ | S ₇ | S ₇ | 0 |
| 100 | S ₃ | S ₀ | S ₆ | 0 |
| 111 | S ₄ | S ₆ | S ₀ | 0 |
| 001 | S ₆ | S ₁ | S ₂ | 1 |
| 101 | S ₇ | S ₀ | S ₀ | 0 |

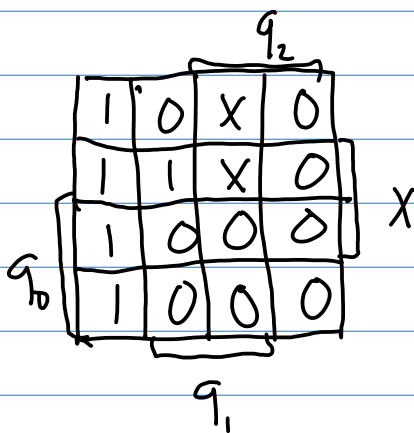
Guidelines

- states with the same NS
 (S₀S₆) ✓
 (S₃S₇) ✓ (S₄S₇) ✓
- states which are NS of a state
 (S₁S₂)² (S₃S₄)^X (S₀S₆)² ✓
- same output for given input
 (S₀S₁S₂S₃S₄S₇)

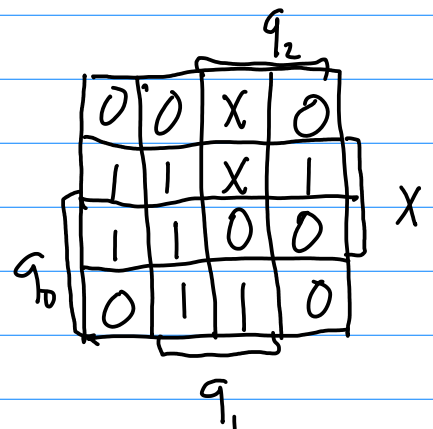
| PS | NS | | Z |
|--|---|---|---|
| | X=0 | X=1 | |
| q ₂ q ₁ q ₀ | q ₂ ⁺ q ₁ ⁺ q ₀ ⁺ | q ₂ ⁺ q ₁ ⁺ q ₀ ⁺ | |
| 000 | 010 | 011 | 0 |
| 001 | 010 | 011 | 1 |
| 010 | 100 | 111 | 0 |
| 011 | 101 | 101 | 0 |
| 100 | 000 | 001 | 0 |
| 101 | 000 | 000 | 0 |
| 110 | XXX | XXX | X |
| 111 | 001 | 000 | 0 |



$$D_2 = q_2^+$$



$$D_1 = q_1^+$$



$$D_0 = q_0^+$$