

3-bit Gray Code Counter

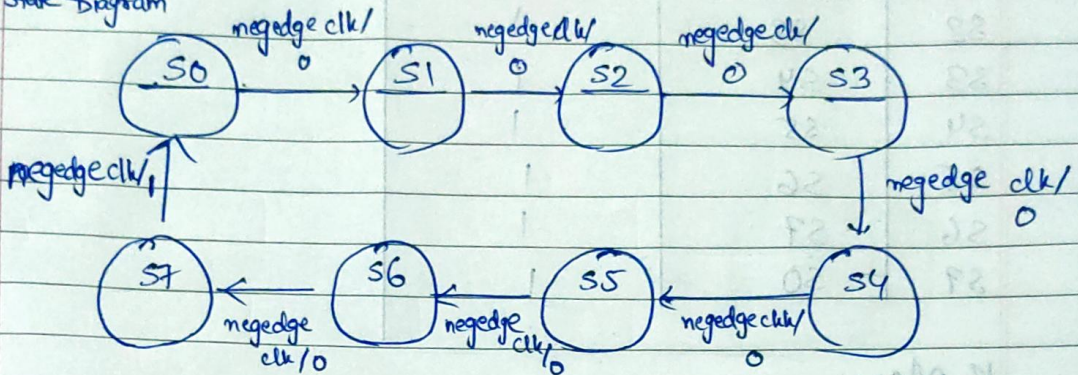
saathi

Date ___/___/___ Assignment 4: Q1

Let the states be:

S0: 000 S1: 001 S2: 011 S3: 010 S4: 110
S5: 111 S6: 101 S7: 100

Mealy Machine:
state diagram



state Table/ Transition Table/ Output Table

Curr state	Next state at negedge clk	Output
S0	S1	0
S1	S2	0
S2	S3	0
S3	S4	0
S4	S5	0
S5	S6	0
S6	S7	0
S7	S0	1

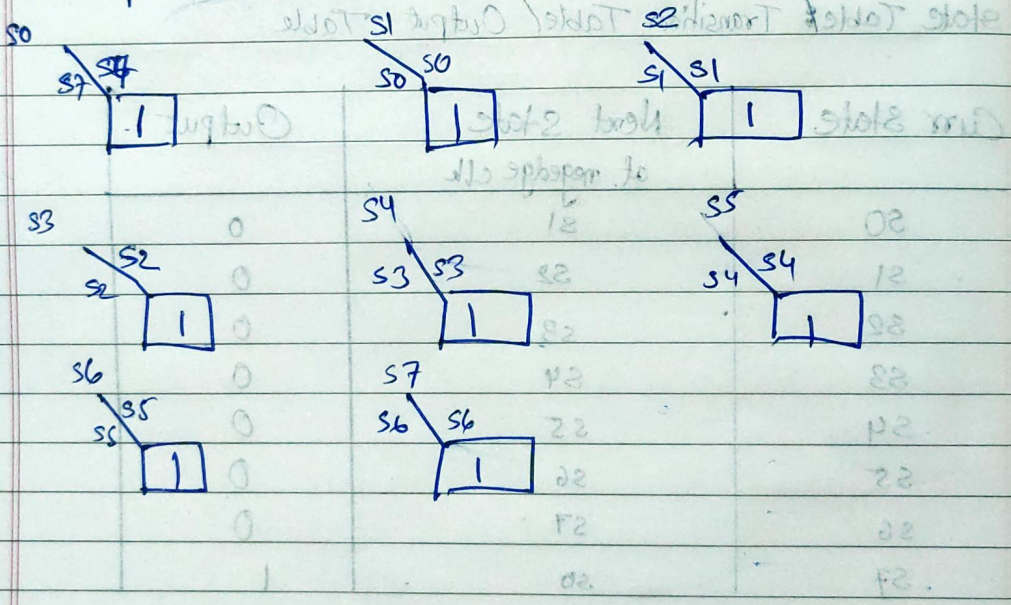
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IS : A handwritten

Excitation Table :

Q_n	Q_{n+1}	Next State
S0	S1	
S1	S2	
S2	S3	
S3	S4	
S4	S5	
S5	S6	
S6	S7	
S7	S0	

K-Maps :



Date ____ / ____ / ____

Circuit

