State Reduction

State diagram

Present state	Next state X=0 ✓	Next state X=1	Output X=0	Output X=1
a	b	c	0	0
b	d	e c	1	0
c	c ✓	d	0	1
d	a	d	0	0
e	c ✓	d ✓	0	1
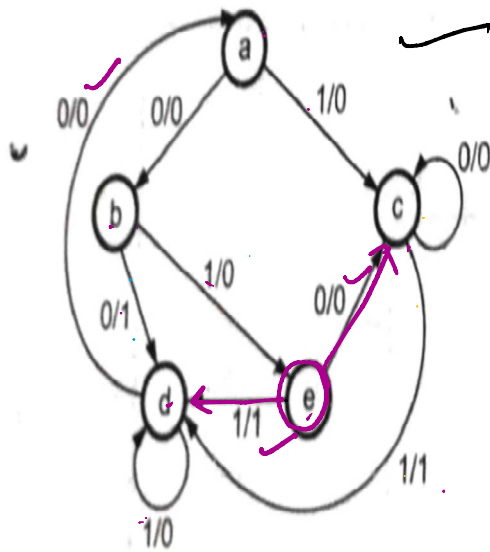
State 'c' is equivalent to
State 'e' because its
next states and o/ps are same
c = e

Present state	Next state X=0	Next state X=1	Output X=0	Output X=1
a	b	c	0	0
b	d	c	1	0
c	c	d	0	1
d	a	d	0	0

Y=

→ I/p

Mealy machine