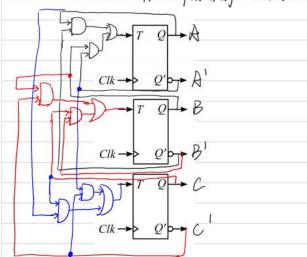
chema cho	instic t	able				che	racte	n3tic	eque	noith
J	k l	2 _{t1}				ι	Stt1 =	J R	; +	k'127
V	0	Vt	No charge							
0	1	0	Reset							
1	0	1	Set							
1		Kt.	Comp lement	f						
T Pup-	flop					k	t+1 =	T D Qt		
	ctenitic	table.								
	Rt									
0			charge							
			nglement							
•			•							
	Q1t+) - Jle	+ K' R			Ja = x'	KN 3	В		
a.	At+1 =	7	n'At' + Bt A	Qt.		JB=X				
	Bt+1 *		Bt' + Att							
Ь	Pres	ient	Input Ne					FF imp	nts	
	A	B	×	A	В		JA	KA	Jø	KB
	0	υ	2	1	0		J	υ	V	1
	V	0	l l	Û	1		J	V	1)
	v	1	0	1	I		1	1	O	1
	V	1	1	0	V		J	1	1	1
	1	V	0	1	v		1	V	V	v
	1	v	1	1	1		U	V	1	V
	1	1	U	0			1	1	J	V
)	1	1	0	1		O	1	1	0
			<u> </u>	(
		,	100	9//	··/					
		1	×	//	1					
			X 60	7						
			(11)	\rightarrow	(11)					

Pre	sent S	tate	I	Next State	Flip-Flop Inputs			
C(t)	B(t)	A(t)	C(t+1)	B(t+1)	A(t+1)	TC	ТВ	TA
0	0	0	1	D	U	1	0	0
0	0	1	0	U	U	0	0)
0	1	0	X	X	х	Х	X	X
0	1	1	0	0	1	0	1	0
1	0	0	1	1	0	0	1	0
1	0	1	X	X	X	Х	X	X
_ 1	1	0	1	J	- 1	0	0	1
1	1	1	υ	1	1	1	0	0
210)	21)	(10	(10))	TA	00 0 00 0 0 0 1 7	() + A () () () () () () () () () ()	

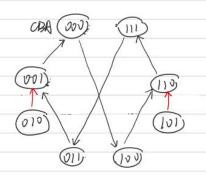
Enplanation of why the counter may not operate properly.

Because when 010 the $\{Tc, Tb, Tb\} = 3'b$ 111, then the endport is 101. When W1, the $\{Tc, Tb, Tb\} = 3'b$ 111, then the endport is 010. It goes the cycle.



After

Pre	sent S	tate	Next State				ip-Fl nput	
C(t)	B(t)	A(t)	C(t+1)	B(t+1)	A(t+1)	TC	TB	TA
0	0	0	1	O	J	1	0	0
0	0	1	0	U	U	0	0)
0	1	0	x 0	x 0	X	x()	X	x
0	1	1	0	D	1	0	1	0
1	0	0	1	1	Ô	0	1	0
1	0	1	x)	x)	x O	x0	X	X
1	1	0	1	1	1	0	0	1
1	1	1	O	1	1	1	0	0



Enploration of idea: When the counter reaches vilo or 101, let them go into the contact cycle

¥.	Present	Ing	at	Nent	Ontop	ut				
	k_t	х′	y	le to 1	s'	C	S=	7	W Y	Ø K
	0	0	Ó	0	0	0	C =	ay t	QM.	+ 47
	0	0	1	v		0	D :		uzy +	
	0	J	0	0	1	0	Kt+1 =			
	O)	1)	v	1		J	·J	
	ī	0	0	v	1	Ū				
	1	v	,	1	J	1				
	1	1	0	1	v	1				
	1	1	ſ	i	1	1				
	0)/	, (0)	00/1			11/1	1		
í.	0)/			00/1			11 / 1			
5	0 1/1	1/0		The m			11 / 1 11 / 1			
i.	1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1	1/公		The in	3 the ou	et put of) fly fi the shift the shift	registe		
	7/1	1/公	? 's complement/≅	The in Sout i	3 the ou	et put of	tre shift tre shift	registe		&b+1
	1/) の/の 初始状态存储を一个二进 第n位 Cik Shift Register Cik 電外送行	1/公	's complement后 第n位	The in Sout i	3 the ou	et put of	tre shift tre shift	registe t registe	и	&±+1 0
	70/0 1/) 初始状态存储を一个二进 近知 001010 Shift Register C C K	到数字 001010取2	's complement后 第n位	The in Sout i	3 the ou	et put of	tre shift tre shift let	registe It registe Sout	Sin	
Sandt	初始状态存储都一个二进 知位 比如 001010 Clik C C C 循环运行	到数字 001010取2	's complement后 第n位	The in Sout i	3 the ou	et put of	tre shift the shift let 0	registe tregiste Sunt 0	Sin O	0

Task 1: Design of JK flip-flop in Verilog