			SEE F Wignment				1	
1. Let, 9	nitial C	onfigura	tion he	144-44	[11]0]]]	,		
For T.	Gr the	input l	le "m	0101' [->R				
0->		The state of the s	0 > R	[ -> K				
10	1	>P (V)		(V.)	1-96	(V3)	1-2002	(V4)
			, in	,*->1	1			
	/	· >> N	*					
				(eV5)				
				11 41				
15		0	8 3 3	Halt				
Herre,	ΞΞ	10,1,-3	1		2			
Jane,	3 = 1	8 Vo; 9, ;	Vo 7 V3	Halt gy; Halt=	903			
Jane,	3 = 1	{ 0, 1, - 3 \$ 00; 90; L; R; N 3	Vo 7 V3		203	,		
Jbrue,	3 = 1	8 Vo; 9, ;	Vo 7 V3		263	,		
	3 = 1 D = 1	8 Vo; 9, ;	Vo 7 V3		963			
	3 = 1 D = 1	8 Vo; 9, ;	V27 V3/		203			
3FM 37 90	3 = 1 D = 1 R QOR	1 9, R 42R	%27 V3/ 95 N 95 N		263			
SFM SY OY. OY,	3 = 1 D = 1	1 9, R 9, R 9, R	V27 V3/		203			
20 SFM 37 90 91 92 25	3 = 1 D = 1 R QOR	1 9, R 9, R 9, R 9, R 9, R 9, R	%27 V3/ 95 N 95 N		263			
20 SFM 27 27 25 23 24	3 = 1 D = 1 R QOR	1 9, R 9, R 9, R	%27 V3/ 95 N 95 N		203			
20 SFM 37 90 91 92 25 93	3 = 1 D = 1 R Qvo R Qvo R	1 9, R 9, R 9, R 9, R 9, R 9, R	9/5 N 9/5 N 9/5 N		203			
25 9/4	3 = 1 D = 1 R Qvo R Qvo R	1 9, R 9, R 9, R 9, R 9, R 9, R	9/5 N 9/5 N 9/5 N		203			

dimulation
Laking | 1110111; Inetial Config

 $8(q_{c},1) = (q_{c},R)$ 

11 110111; S(9,,1) = (9,5R)

 $S(q_2, 1) = (q_3 L)$ 

10110111; S(93,1) = (094R)

 $\delta(q_{4,1}) = (q_{0}R)$   $\delta(q_{4,1}) = (q_{0}R)$   $\delta(q_{4,1}) = (q_{0}R)$ 

91 10110111. 8(04,0) = (40R)

10 11 0 111;  $8(q_{0,1}) = (q_{1}R)$ 10 11 0 111;  $8(q_{1,1}) = (q_{2}R)$ 

 $\frac{q_2}{q_3}$ 30 10 11 0 111;  $\frac{\delta(q_5, 1) - (q_3)}{q_3}$ 

10110101 8 (9/3,1)= (09/4R) 94 10110101. 8 (Q4, 1) = (YOR) 8 (90, ;) = (95N) 10 H 0101; 1-2R 0-26 02 1 -> L T = {0,1,13 S= [ 90, 9, 92, Halt = 93 } D= { L, R, N } 0 VIL 9/0 92 L 93N OL 9/31V V2 11 93

· 08010; S(92,1) = (OL)

8(9/2,0) = (11) 101109

8(V2,;) = ( V3N)

Thus, the TM generates the 2's complement for input string ;01010' to 10110'.