Lab 7 – Keypad Scanner State Machine]	
By Zak Rowland		
Keypad_scanner.v		
,, <u> </u>	1	
Inputs:		
• clk	~	
• column : 4 bits		
Outputs:		
row: 4 bitsdecoded: 5 bits		
decoded . 3 bits		
	\sim	
<i>"</i>		
adeo	,	
, beco	/ IDLE	
(0),12	_	
215,277	decoded = 5'b11111	
column = 4'b1111 / decoded = 5'b11111	row = 4'b1111	
decoded = 5'b11111		
		27
	4'b1111/-	
	401111/-	
// KEY_PRESSED	If any column = 0 / decoded /	ROW_ONE \
// /	= value for button	
// // // // // // // // // // // // //		row = 4'b0111
/ row = 4'b0000		
		No columns = 0 / decoded =
If any column = 0 / decoded =	If any column = 0 / decoded	5'b11111
value for button	= value for button	//
ROW_FOUR		ROW_TWO
\\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	f any column = 0 / decoded	
\ row = 4'b1110 /	= value for button	row = 4'b1011
	·	
45	/ ROW_THREE \	/ /
		//
No columns = 0 / decoded =	row = 4'b1101	No columns = 0 / decoded =
5'b11111		5'b11111