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1 //mux4to1.do
2 //author: Jiakai Shi
3 //student #: 1003986760
4
5 vlib work
6
7 vlog -timescale 1ns/1ns mux4to1.v
8
9 vsim mux4to1
10
11 log {/*}
12
13 add wave {/*}
14
15 # In the next 5 cases, control s1s0 = 00. Then SW[0] control LEDR[0].
16 force {SW[0]} 0
17 force {SW[1]} 0
18 force {SW[2]} 0
19 force {SW[3]} 0
20 force {SW[8]} 0
21 force {SW[9]} 0
22 run 5ns
23
24 force {SW[0]} 1
25 force {SW[1]} 0
26 force {SW[2]} 0
27 force {SW[3]} 0
28 force {SW[8]} 0
29 force {SW[9]} 0
30 run 5ns
31
32 force {SW[0]} 0
33 force {SW[1]} 1
34 force {SW[2]} 0
35 force {SW[3]} 0
36 force {SW[8]} 0
37 force {SW[9]} 0
38 run 5ns
39
40 force {SW[0]} 0
41 force {SW[1]} 0
42 force {SW[2]} 1
43 force {SW[3]} 0
44 force {SW[8]} 0
45 force {SW[9]} 0
46 run 5ns
47
48 force {SW[0]} 0
49 force {SW[1]} 0
50 force {SW[2]} 0

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51 force {SW[3]} 1
52 force {SW[8]} 0
53 force {SW[9]} 0
54 run 5ns
55
56 # In the next 5 cases, control s1s0 = 01. Then SW[2] control LEDR[0].
57 force {SW[0]} 0
58 force {SW[1]} 0
59 force {SW[2]} 0
60 force {SW[3]} 0
61 force {SW[8]} 0
62 force {SW[9]} 1
63 run 5ns
64
65 force {SW[0]} 1
66 force {SW[1]} 0
67 force {SW[2]} 0
68 force {SW[3]} 0
69 force {SW[8]} 0
70 force {SW[9]} 1
71 run 5ns
72
73 force {SW[0]} 0
74 force {SW[1]} 1
75 force {SW[2]} 0
76 force {SW[3]} 0
77 force {SW[8]} 0
78 force {SW[9]} 1
79 run 5ns
80
81 force {SW[0]} 0
82 force {SW[1]} 0
83 force {SW[2]} 1
84 force {SW[3]} 0
85 force {SW[8]} 0
86 force {SW[9]} 1
87 run 5ns
88
89 force {SW[0]} 0
90 force {SW[1]} 0
91 force {SW[2]} 0
92 force {SW[3]} 1
93 force {SW[8]} 0
94 force {SW[9]} 1
95 run 5ns
96
97 # In the next 5 cases, control s1s0 = 10. Then SW[3] control LEDR[0].
98 force {SW[0]} 0
99 force {SW[1]} 0
100 force {SW[2]} 0

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101 force {SW[3]} 0
102 force {SW[8]} 1
103 force {SW[9]} 0
104 run 5ns
105
106 force {SW[0]} 1
107 force {SW[1]} 0
108 force {SW[2]} 0
109 force {SW[3]} 0
110 force {SW[8]} 1
111 force {SW[9]} 0
112 run 5ns
113
114 force {SW[0]} 0
115 force {SW[1]} 1
116 force {SW[2]} 0
117 force {SW[3]} 0
118 force {SW[8]} 1
119 force {SW[9]} 0
120 run 5ns
121
122 force {SW[0]} 0
123 force {SW[1]} 0
124 force {SW[2]} 1
125 force {SW[3]} 0
126 force {SW[8]} 1
127 force {SW[9]} 0
128 run 5ns
129
130 force {SW[0]} 0
131 force {SW[1]} 0
132 force {SW[2]} 0
133 force {SW[3]} 1
134 force {SW[8]} 1
135 force {SW[9]} 0
136 run 5ns
137
138 # In the next 5 cases, control s1s0 = 11. Then SW[1] control LEDR[0].
139 force {SW[0]} 0
140 force {SW[1]} 0
141 force {SW[2]} 0
142 force {SW[3]} 0
143 force {SW[8]} 1
144 force {SW[9]} 1
145 run 5ns
146
147 force {SW[0]} 1
148 force {SW[1]} 0
149 force {SW[2]} 0
150 force {SW[3]} 0

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151 force {SW[8]} 1
152 force {SW[9]} 1
153 run 5ns
154
155 force {SW[0]} 0
156 force {SW[1]} 1
157 force {SW[2]} 0
158 force {SW[3]} 0
159 force {SW[8]} 1
160 force {SW[9]} 1
161 run 5ns
162
163 force {SW[0]} 0
164 force {SW[1]} 0
165 force {SW[2]} 1
166 force {SW[3]} 0
167 force {SW[8]} 1
168 force {SW[9]} 1
169 run 5ns
170
171 force {SW[0]} 0
172 force {SW[1]} 0
173 force {SW[2]} 0
174 force {SW[3]} 1
175 force {SW[8]} 1
176 force {SW[9]} 1
177 run 5ns

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