

Truth table encoder:

S	R	P	S1	S0
0	0	0	0	0
0	0	1	1	1
0	1	0	0	1
0	1	1	0	0
1	0	0	1	0
1	0	1	0	0
1	1	0	0	0
1	1	1	0	0

Truth table result logic:

S1.1	S0.1	S1.2	S0.2	G1	G2	
0	0	0	0	0	0	} 1 st player does not play
0	0	0	1	0	1	
0	0	1	0	0	1	
0	0	1	1	0	1	
0	1	0	0	1	0	} 1 st player chooses rock
0	1	0	1	1	1	
0	1	1	0	1	0	
0	1	1	1	0	1	
1	0	0	0	1	0	} 1 st player chooses scissors
1	0	0	1	0	1	
1	0	1	0	1	1	
1	0	1	1	1	0	
1	1	0	0	1	0	} 1 st player chooses paper
1	1	0	1	1	0	
1	1	1	0	0	1	
1	1	1	1	0	0	