

/home/itzinfinity/Cozy Drive/100daysofRTL/day_005/project_1/project_1.srscs/sources_1/new/random_expression.v

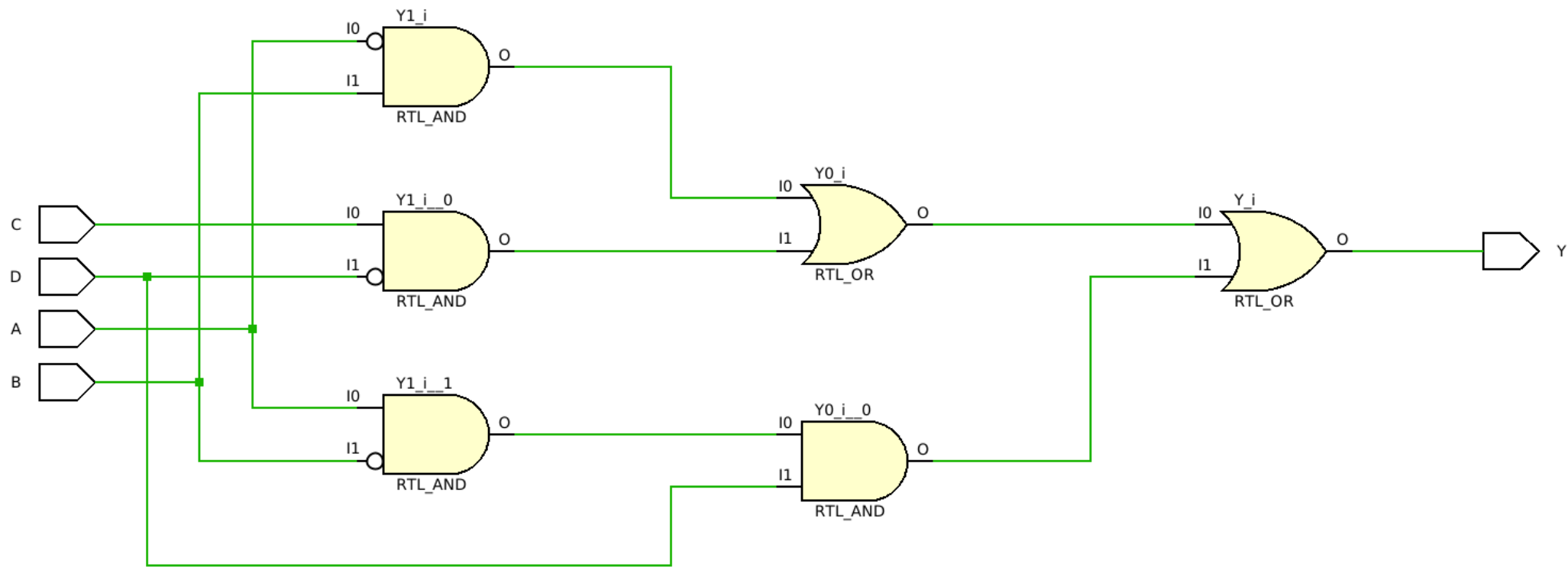


```
1  `timescale 1ns / 1ps
2  ///////////////////////////////////////////////////////////////////
3  // Engineer:Anjan Prasad
4  // Create Date: 09/26/2024 08:21:52 PM
5  // Module Name: random_expression
6  ///////////////////////////////////////////////////////////////////
7
8
9  module random_expression(
10     input A,
11     input B,
12     input C,
13     input D,
14     output Y
15 );
16
17     assign Y = (~A & B) | (C & ~D) | (A & ~B & D);
18 endmodule
19
```

/home/itzzinfinity/Cozy Drive/100daysofRTL/day_005/project_1/project_1.srscs/sim_1/new/r_e_tb.v



```
1 `timescale 1ns / 1ps
2 ///////////////////////////////////////////////////////////////////
3 // Engineer:Anjan Prasad
4 // Create Date: 09/26/2024 08:21:52 PM
5 // Module Name: random_expression
6 ///////////////////////////////////////////////////////////////////
7
8
9 module r_e_tb;
10
11     reg A, B, C, D;
12     wire Y;
13     random_expression dut (A, B, C, D, Y);
14
15
16     initial begin
17
18         $display("A B C D | Y");
19         $monitor("%b %b %b %b | %b", A, B, C, D, Y);
20
21
22         A = 0; B = 0; C = 0; D = 0; #10;
23         A = 0; B = 0; C = 0; D = 1; #10;
24         A = 0; B = 0; C = 1; D = 0; #10;
25         A = 0; B = 0; C = 1; D = 1; #10;
26         A = 0; B = 1; C = 0; D = 0; #10;
27         A = 0; B = 1; C = 0; D = 1; #10;
28         A = 0; B = 1; C = 1; D = 0; #10;
29         A = 0; B = 1; C = 1; D = 1; #10;
30         A = 1; B = 0; C = 0; D = 0; #10;
31         A = 1; B = 0; C = 0; D = 1; #10;
32         A = 1; B = 0; C = 1; D = 0; #10;
33         A = 1; B = 0; C = 1; D = 1; #10;
34         A = 1; B = 1; C = 0; D = 0; #10;
35         A = 1; B = 1; C = 0; D = 1; #10;
36         A = 1; B = 1; C = 1; D = 0; #10;
37         A = 1; B = 1; C = 1; D = 1; #10;
38
39     $finish;
40     end
41
42 endmodule
43
```



Scope

Sources

Objects

Protocol Instances

random_expression.v x r_e_tb.v x **Untitled 3** x



Name	Value
A	1
B	1
C	1
D	1
Y	0

