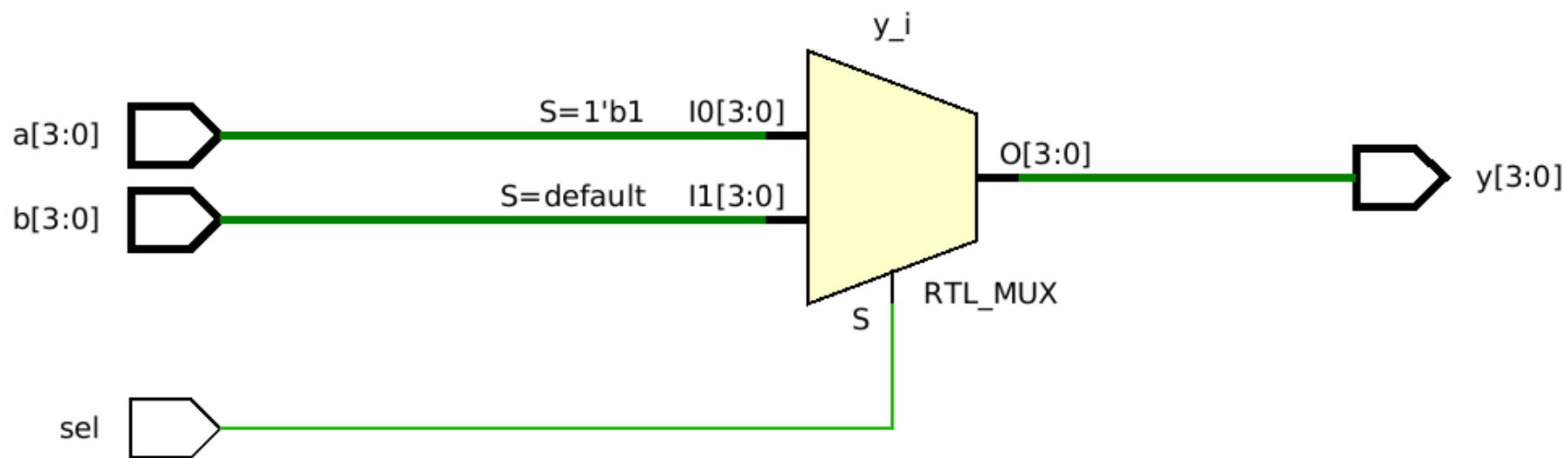




1 Cell

13 I/O Ports

13 Nets





Name

Value

> a[3:0]

d

> b[3:0]

d

sel

1

> y[3:0]

5

100.000 ns

0.000 ns

10.000 ns

20.000 ns

30.000 ns

40.000 ns

50.000 ns

60.000 ns

70.000 ns

80.000 ns

90.000 ns

X

4

3

5

d

6

5

f

8

X

1

d

2

6

c

5

7

2

5

X

4

3

5

d

5

7

2

5

Tcl Console



Messages

Log



}

run 1000ns

Select line is Sel so now the output is y , where a and b are:

x	x,	x	x
1	4,	4	1
1	3,	3	13
1	5,	5	2
1	13,	13	6
1	13,	13	12
0	5,	6	5
0	7,	5	7
0	2,	15	2
0	5,	8	5

\$finish called at time : 100 ns : File "/home/itzzinfinity/Cozy Drive/100daysofRTL/da

INFO: SUCCESS: Verilog code is synthesized successfully. The output is in the directory: /home/itzzinfinity/Cozy Drive/100daysofRTL/da



Type a Tcl command here

/home/itzzinfinity/Cozy Drive/100daysofRTL/day_022/project_1/project_1.srscs/sources_1/new/mux_2_to_1.v



```
1  `timescale 1ns / 1ps
2  ///////////////////////////////////////////////////////////////////
3  // Engineer: Anjan Prasad
4  // Create Date: 10/13/2024 06:16:57 PM
5  // Module Name: mux_2_to_1
6  ///////////////////////////////////////////////////////////////////
7
8
9  module mux_2_to_1(
10     input [3:0] a,b,
11     input sel,
12     output [3:0] y);
13
14     assign y = (sel)?a:b;
15
16     |
17 endmodule
```

/home/itzzinfinity/Cozy Drive/100daysofRTL/day_022/project_1/project_1.srscs/sim_1/new/mux_tb.v



```
1  `timescale 1ns / 1ps
2  ///////////////////////////////////////////////////////////////////
3  // Engineer: Anjan Prasad
4  // Create Date: 10/13/2024 06:16:57 PM
5  // Module Name: mux_tb
6  ///////////////////////////////////////////////////////////////////
7
8
9  module mux_tb;
10     reg [3:0] a,b;
11     reg sel;
12     wire [3:0] y;
13
14     mux_2_to_1 DUT (a,b,sel,y);
15     initial begin
16         $display("Select line is Sel so now the output is y , where a and b are:");
17         $monitor("                %b                %d        %d        %d", sel,y,a,b);
18     repeat(10) begin
19         #10
20         a= $random %16 ;
21         b= $random %16 ;
22         sel = $random;
23     end
24     $finish;
25 end
26 endmodule
27
```