

Multiplexer

Multiplexer is basically said to be a data selector and we select which path should be sent to the output by using select lines. There are different types of multiplexers like 2x1 mux, 4x1mux and so on.

TRUTH TABLE:

S0	S1	OUTPUT
0	0	A
0	1	B
1	0	C
1	1	D

Like this a multiplexer will work and the respective input line will be connected by using select lines.

VEILOG CODE:

4x1 multiplexer

```
module fourto1_mux(s0,s1, a,b,c,d,y );
output reg y;
input a,b,c,d;
input s0,s1;
always @(a or b or c or d or s0 or s1)
begin
case({s0,s1})
2'b00: y=a;
2'b01: y=b;
2'b10: y=c;
2'b11: y=d;
```

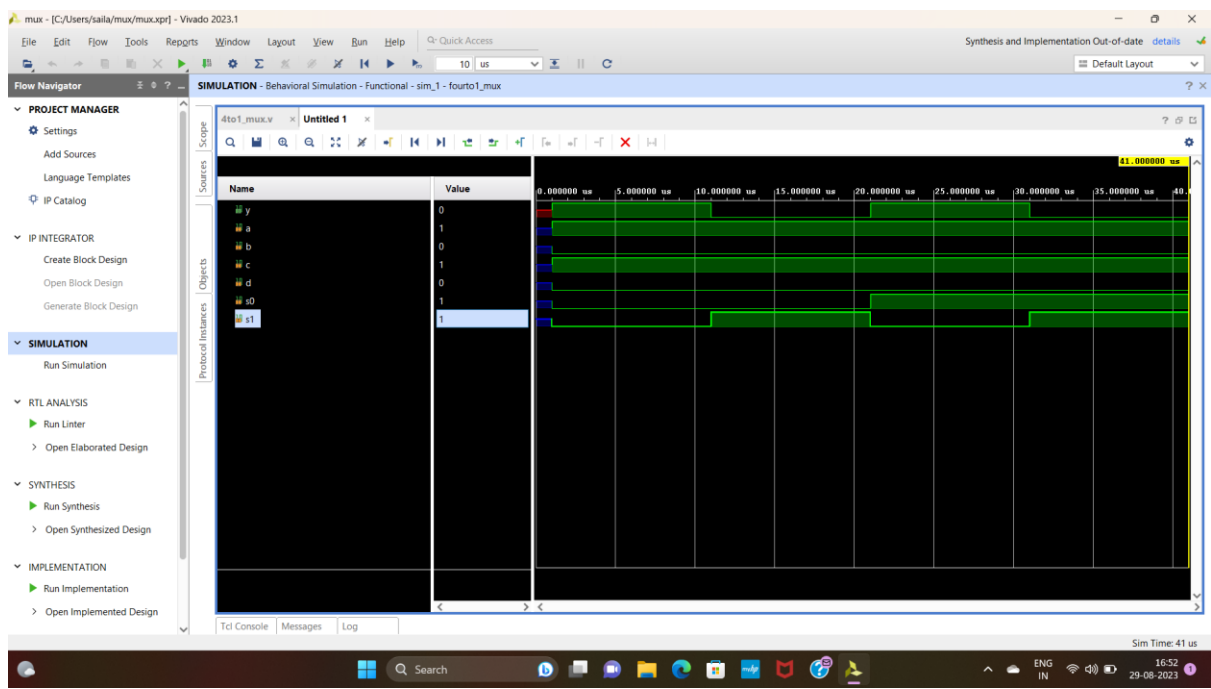
default y=1'bx;

endcase

end

endmodule

SIMULATION RESULT:



SCHEMATIC DIAGRAM:

