```verilog
`timescale 1ns / 1ps
//////////////////////////////////////////////////////////////////////
//////////////////////////////////////////////////
// Company:
// Engineer:
//
// Create Date: 10/22/2020 01:27:56 AM
// Design Name:
// Module Name: MUX8_1
// Project Name:
// Target Devices:
// Tool Versions:
// Description:
//
// Dependencies: _!
//
// Revision:
// Revision 0.01 - File Created
// Additional Comments:
//
//////////////////////////////////////////////////////////////////////
//////////////////////////////////////////////////


module MUX8_1(
    input [7:0] in,
    input [2:0] sel,
```

```verilog
    output out
    );

    assign out = (in[0] & ~sel[2] & ~sel[1] &
~sel[0])|
    (in[1] & ~sel[2] & ~sel[1] & sel[0])|
    (in[2] & ~sel[2] & sel[1] & ~sel[0])|
    (in[3] & ~sel[2] & sel[1] & sel[0])|
    (in[4] & sel[2] & ~sel[1] & ~sel[0])|
    (in[5] & sel[2] & ~sel[1] & sel[0])|
    (in[6] & sel[2] & sel[1] & ~sel[0])|
    (in[7] & sel[2] & sel[1] & sel[0]);

endmodule
```