

```
timescale      1ns        /          1ps
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
//      Company:
//      Engineer:
//
//      Create      Date:      04/13/2022      05:57:21      PM
//      Design      Name:
//      Module      Name:      m2_1x8
//      Project      Name:
//      Target      Devices:
//      Tool      Versions:
//      Description:
//
//      Dependencies:
//
//      Revision:
//      Revision      0.01      -      File      Created
//      Additional      Comments:
//
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
```

```
module      m2_1x8(
    input [7:0] in0,
    input [7:0] in1,
    input sel,
    output [7:0] o
);

    assign o[0] = (~sel & in0[0]) | (sel & in1[0]);
    assign o[1] = (~sel & in0[1]) | (sel & in1[1]);
    assign o[2] = (~sel & in0[2]) | (sel & in1[2]);
    assign o[3] = (~sel & in0[3]) | (sel & in1[3]);
    assign o[4] = (~sel & in0[4]) | (sel & in1[4]);
    assign o[5] = (~sel & in0[5]) | (sel & in1[5]);
    assign o[6] = (~sel & in0[6]) | (sel & in1[6]);
    assign o[7] = (~sel & in0[7]) | (sel & in1[7]); //not sure if i need this one but
feels right :(

endmodule
```