

```
1  module muxX4 (
2      input [7:0] a,
3      input [7:0] b,
4      input [7:0] c,
5      input [7:0] d,
6      input [1:0] s,
7      output reg [7:0] f
8  );
9
10     always @(*) begin
11         case (s)
12             2'b00: f[7:0] <= a[7:0];
13             2'b01: f[7:0] <= b[7:0];
14             2'b10: f[7:0] <= c[7:0];
15             2'b11: f[7:0] <= d[7:0];
16         endcase
17     end
18 endmodule
```