

```
1 // HW#1 Question #4
2 module test(one,two,three,four,five,six,seven,eight,
3 ,key,out);
4
5 input [31:0] one,two,three,four,five,six,seven,eight;
6 output reg [31:0] out;
7 reg [31:0] old_out;
8 input [2:0] key;
9
10 assign old_out = out;
11
12 always@(*) begin
13
14 if (key == 3'b000) out = one;
15 else if (key == 3'b001) out = two;
16 else if (key == 3'b010) out = three;
17 else if (key == 3'b011) out = four;
18 else if (key == 3'b100) out = five;
19 else if (key == 3'b101) out = six;
20 else if (key == 3'b110) out = seven;
21 else if (key == 3'b111) out = eight;
22 else out = old_out;
23
24
25 end
26 endmodule
```