

```
1  module driver7seg (  
2      input [3:0] bin,  
3      output [6:0] hex  
4  );  
5  
6  reg [6:0] rhex;  
7  
8  always @*  
9      case (bin)  
10         4'b0000: rhex = 7'b1000000;  
11         4'b0001: rhex = 7'b1111001;  
12         4'b0010: rhex = 7'b0100100;  
13         4'b0011: rhex = 7'b0110000;  
14         4'b0100: rhex = 7'b0011001;  
15         4'b0101: rhex = 7'b0010010;  
16         4'b0110: rhex = 7'b0000010;  
17         4'b0111: rhex = 7'b1111000;  
18         4'b1000: rhex = 7'b0000000;  
19         4'b1001: rhex = 7'b0010000;  
20         4'b1010: rhex = 7'b0001000;  
21         4'b1011: rhex = 7'b0000011;  
22         4'b1100: rhex = 7'b1000110;  
23         4'b1101: rhex = 7'b0100001;  
24         4'b1110: rhex = 7'b0000110;  
25         4'b1111: rhex = 7'b0001110;  
26     endcase  
27  assign hex = rhex;  
28  
29  endmodule  
30
```