

```
1  `timescale 1ns / 1ps
2  //*****//
3  // Class: CECS 361 //
4  // Project: Project1-Cecs361 //
5  // //
6  // File name: <hex7seg.v> //
7  // Abstract: This module will change hex value inputs to be able //
8  //           to use with the seven segment display. //
9  // Created by <Alina Suon> on <09-18-18>. //
10 // Copyright © 2018 <Alina Suon>. All rights reserved. //
11 // //
12 // In submitting this file for class work at CSULB //
13 // I am confirming that this is my work and the work //
14 // of no one else. In submitting this code I acknowledge that //
15 // plagiarism in student project work is subject to dismissal. //
16 // from the class //
17 //*****//
18 module hex7seg (hex, a, b, c, d, e, f, g);
19     input [3:0] hex;
20     output      a, b, c, d, e, f, g;
21     reg         a, b, c, d, e, f, g;
22
23     always @ (hex) begin
24         case (hex)
25             4'b0000: {a, b, c, d, e, f, g} = 7'b0000001;
26             4'b0001: {a, b, c, d, e, f, g} = 7'b1001111;
27             4'b0010: {a, b, c, d, e, f, g} = 7'b0010010;
28             4'b0011: {a, b, c, d, e, f, g} = 7'b0000110;
29             4'b0100: {a, b, c, d, e, f, g} = 7'b1001100;
30             4'b0101: {a, b, c, d, e, f, g} = 7'b0100100;
31             4'b0110: {a, b, c, d, e, f, g} = 7'b0100000;
32             4'b0111: {a, b, c, d, e, f, g} = 7'b0001111;
33             4'b1000: {a, b, c, d, e, f, g} = 7'b0000000;
34             4'b1001: {a, b, c, d, e, f, g} = 7'b0000100;
35             4'b1010: {a, b, c, d, e, f, g} = 7'b0001000;
36             4'b1011: {a, b, c, d, e, f, g} = 7'b1100000;
37             4'b1100: {a, b, c, d, e, f, g} = 7'b0110001;
38             4'b1101: {a, b, c, d, e, f, g} = 7'b1000010;
39             4'b1110: {a, b, c, d, e, f, g} = 7'b0110000;
40             4'b1111: {a, b, c, d, e, f, g} = 7'b0111000;
41             default: {a, b, c, d, e, f, g} = 7'b1111111;
42         endcase
43     end
44 endmodule
45
```