File: //Mac/Home/Documents/Aldec_Codes/prelab10/prelab10/src/hex_seven.vhd

```
1   ----------------------------------------------------------------------------
    ----
2   --
3   -- Title       : hex_seven
4   -- Design      : prelab10
5   -- Author      : Dongyun Lee
6   -- Company     : Stony Brook University
7   --
8   ----------------------------------------------------------------------------
    ----
9   --
10  -- File        :
    \\Mac\Home\Documents\Aldec_Codes\prelab10\prelab10\src\hex_seven.vhd
11  -- Generated   : Sun Apr 21 23:51:29 2024
12  -- From        : interface description file
13  -- By          : Itf2Vhdl ver. 1.22
14  --
15  ----------------------------------------------------------------------------
    ----
16  --
17  -- Description :
18  --
19  ----------------------------------------------------------------------------
    ----
20
21  library ieee;
22  use ieee.std_logic_1164.all;
23  use ieee.numeric_std.all;
24
25
26  entity hex_seven is
27      port(
28          hex : in std_logic_vector(3 downto 0); -- hexadecimal input
29          -- segs. a..g right justified
30          seg_drive : out std_logic_vector(7 downto 0)
31      );
32  end hex_seven;
33
34
35  architecture behavioral of hex_seven is
36  begin
37      with hex select
38      seg_drive <=
39              "01111110" when "0000", -- 0
40              "00110000" when "0001", -- 1
41              "01101101" when "0010", -- 2
42              "01111001" when "0011", -- 3
43              "00110011" when "0100", -- 4
44              "01011011" when "0101", -- 5
45              "01011111" when "0110", -- 6
46              "01110000" when "0111", -- 7
47              "01111111" when "1000", -- 8
48              "01111011" when "1001", -- 9
49              "01110111" when "1010", -- A
50              "00011111" when "1011", -- b
51              "01001110" when "1100", -- C
52              "00111101" when "1101", -- d
```

```
53              "01001111" when "1110", -- E
54              "01000111" when others; -- F
55  end architecture behavioral;
56
```