

```
1  library ieee;
2  use ieee.numeric_std.all;
3  use ieee.std_logic_1164.all;
4
5  entity sevenSegDecoder is
6      port(
7          data: in std_logic_vector(3 downto 0);
8          ss: out std_logic_vector(6 downto 0)
9      );
10 end entity;
11
12 architecture behavior of sevenSegDecoder is
13 begin
14
15     ss <=      "1000000" when data = x"0" else
16               "1111001" when data = x"1" else
17               "0100100" when data = x"2" else
18               "0110000" when data = x"3" else
19               "0011001" when data = x"4" else
20               "0010010" when data = x"5" else
21               "0000010" when data = x"6" else
22               "1111000" when data = x"7" else
23               "0000000" when data = x"8" else
24               "0011000" when data = x"9" else
25               "0001000" when data = x"a" else --invertidos
26               "1100000" when data = x"b" else
27               "0110001" when data = x"c" else
28               "1000010" when data = x"d" else
29               "0110000" when data = x"e" else
30               "0111000";
31 end architecture;
```