```
1   LIBRARY ieee;--chama as bibliotecas
2   USE ieee.std_logic_1164.all;
3   USE ieee.numeric_std.all;
4   PACKAGE bcd_decoder IS--define o pacode
5    FUNCTION conviseg(A: INTEGER) RETURN STD_LOGIC_VECTOR;-- define a entrada e saida do
    pacote como a função
6   END bcd_decoder;
7   PACKAGE BODY bcd_decoder IS--especifica o pacote
8    FUNCTION conviseg(A: INTEGER) RETURN STD_LOGIC_VECTOR IS-- especifica a função
9     VARIABLE result: STD_LOGIC_VECTOR(20 downto 0);-- variavel saida
10   BEGIN
11    CASE A IS-- analiza o inteiro A e da a saida em vetor
12     WHEN -7 => result := "01111111111111011000";
13     WHEN -6 => result := "01111111111110000010";
14     WHEN -5 => result := "01111111111110010010";
15     WHEN -4 => result := "01111111111110011001";
16     WHEN -3 => result := "01111111111110110000";
17     WHEN -2 => result := "01111111111110100100";
18     WHEN -1 => result := "01111111111111111001";
19     WHEN 0 => result := "11111111111111000000";
20     WHEN 1 => result := "11111111111111111001";
21     WHEN 2 => result := "11111111111110100100";
22     WHEN 3 => result := "11111111111110110000";
23     WHEN 4 => result := "11111111111110011001";
24     WHEN 5 => result := "11111111111110010010";
25     WHEN 6 => result := "11111111111110000010";
26     WHEN 7 => result := "11111111111111011000";
27     WHEN 8 => result := "11111111111110000000";
28     WHEN 9 => result := "11111111111110010000";
29     WHEN 10 => result := "11111111110011000000";
30     WHEN 11 => result := "11111111110011111001";
31     WHEN 12 => result := "11111111110010100100";
32     WHEN 13 => result := "11111111110010110000";
33     WHEN 14 => result := "11111111110010011001";
34     WHEN 15 => result := "11111111110010010010";
35     WHEN 16 => result := "11111111110010000010";
36     WHEN 17 => result := "11111111110011011000";
37     WHEN 18 => result := "11111111110010000000";
38     WHEN 19 => result := "11111111110010010000";
39     WHEN 20 => result := "11111110100100000000";
40     WHEN 21 => result := "11111110100100111001";
41     WHEN 22 => result := "11111110100100100100";
42     WHEN 23 => result := "11111110100100110000";
43     WHEN 24 => result := "11111110100100011001";
44     WHEN 25 => result := "11111110100100010010";
45     WHEN 26 => result := "11111110100100000010";
46     WHEN 27 => result := "11111110100100011000";
47     WHEN 28 => result := "11111110100100000000";
48     WHEN 29 => result := "11111110100100010000";
49     WHEN 30 => result := "11111110110000100000";
50     WHEN 31 => result := "11111110110000111001";
51     WHEN 32 => result := "11111110110000100100";
52     WHEN 33 => result := "11111110110000110000";
53     WHEN 34 => result := "11111110110000011001";
54     WHEN 35 => result := "11111110110000010010";
55     WHEN 36 => result := "11111110110000000010";
56     WHEN 37 => result := "11111110110001011000";
57     WHEN 38 => result := "11111110110000000000";
58     WHEN 39 => result := "11111110110000010000";
59     WHEN 40 => result := "11111110011001100000";
60     WHEN 41 => result := "11111110011001111001";
61     WHEN 42 => result := "11111110011001010100";
62     WHEN 43 => result := "11111110011001011000";
63     WHEN 44 => result := "11111110011001001100";
64     WHEN 45 => result := "11111110011001001010";
65     WHEN 46 => result := "11111110011001000010";
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66       WHEN 47 => result := "11111110011001101 1000" ;
67       WHEN 48 => result := "11111110011001000 0000" ;
68       WHEN 49 => result := "11111110011001001 0000" ;
69       WHEN OTHERS => result := "01111110111111011 1111" ;
70      END CASE;
71      RETURN result;
72     END conviseg;
73
74   END bcd_decoder;--encerra
```