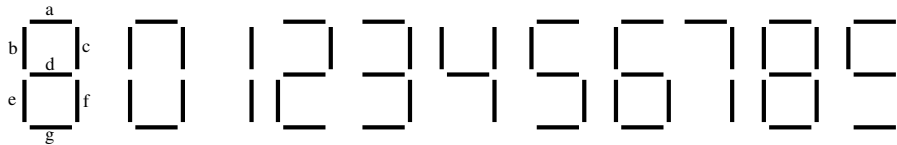

7-segment digit**X37276_en**

Design a circuit that controls a 7-segment display to represent a BCD digit. The circuit has a BCD digit as input and 7 output functions that control the segments (the output must be 1 when the segment must be illuminated).

**Specification**

```
module bcd_seven_segment (digit, a, b, c, d, e, f, g);  
    input [3:0] digit ;  
    output a, b, c, d, e, f, g;
```

Input

- *digit* is the 4-input BCD digit, representing digits from 0 to 9.

Output

- *a-g* are the outputs, each one corresponding to a segment according to the figure.

Problem information

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