4-input majority voter X42168_en

Design a circuit that implements a four-input majority voter. The circuit has four inputs (a, b, c, and d) and two outputs called *maj* and *tie*. When there are more 1's than 0's or more 0's than 1's, *maj* will indicate which value has the majority, whereas *tie* will be 0. If there is the same number of 0's and 1's, then *tie* =1 and the value of *maj* is irrelevant.

Specification

```
module voter4(a, b, c, d, maj, tie);
    input a, b, c, d;
    output maj, tie;
```

Input

- a, b, c and d are the four inputs.

Output

- *maj* is the output indicating which value has majority.
- *tie* is the output indicating there is a tie.

Problem information

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