Recipe name: dice\_seven

## **Inputs**:

sides, integer, the number of sides for each dice. Must be greater than or equal to 1.

## **Outputs:**

*ways*, integer, the number of ways for four dice of *sides* number of sides to roll a total that is an integer multiple of 7.

- 1. Let *ways* be a new integer.
- 2. For each number *first\_dice* from 1 to *sides*, do the following:
  - a. For each number *second\_dice* from 1 to *sides*, do the following:
    - i. For each number *third\_dice* from 1 to *sides*, do the following:
      - 1. For each number *fourth\_dice* from 1 to *sides*, do the following:
        - a. If the remainder of (first\_dice + second\_dice + third\_dice + fourth\_dice) / 7 is 0, then
          - i. Add 1 to ways

3. Return ways