**Two Force Vectors**

Let **A**= <a1, a2, a3> and **B**= <b1, b2, b3> are two force vectors. Can you figure out whether they are parallel, perpendicular or none?

**Problem Description**

**A** and **B** are both 3-dimensional vectors. Their components along x, y and z axes are given in the form of arrays of three integers. Your code should work on the parameters of input to return the string “parallel” if both vectors are parallel, “perpendicular” if both are perpendicular to each other, and “none” otherwise.

**Input Format**

First line contains an array of three integers that are components of vector **A**.

Second line contains an array of three integers that are components of vector **B**.

**Output Format**

Output is either of the strings *parallel*, *perpendicular* or *none*, as per the problem description.

**Constraints**

-103 <= *each component* <= 103

**Sample Input 1**

**2 8 4**

**1 4 2**

**Sample Output 1**

**parallel**

**Explanation**

Here **A**= <2,8,4> and **B**= <1,4,2>. Their cross product is zero, so they are *parallel* to each other.