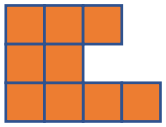
**Find Middle**

You are given a set of N>0 integer vectors of possibly different lengths and whose sum of lengths S is an odd number.

N = 3

S = 3+2+4 = 9



The values within each vector are sorted in ascending order.

Find the value P from all the vectors that is the "middle" value. In other words, find the value P that is more than "½" (i.e., $\frac{S-1}{2}$) the values and also less than "½" the other values.

Write a function
`int findmiddle(vector<vector<int>> &vecs, int &p)`
where
`vecs` is the set of vectors
`p` is the found middle value
and returns 1 and assigns the found middle value to `p` if the sum of lengths S is odd,
otherwise returns 0 and `p` is ignored.

File you must submit: `soln_func.cc`

*Examples:*

vecs = { {1, 2}, {3}, {4, 5} }
Returns 1, sets p=3

vecs = { {}, {1}, {} }
Returns 1, sets p=1

vecs = {{100, 101}, {1, 1, 1, 1}, {200, 201, 203} }
Returns 1, sets p=100

vecs = {{1, 1, 1}, {1, 1}, {1}, {1, 1, 1} }
Returns 1, sets p=1

vecs = { {1}, {1} }
vecs = {}
All return 0, p ignored
*Explanation: S is even in each.*