

Geometric Intersection

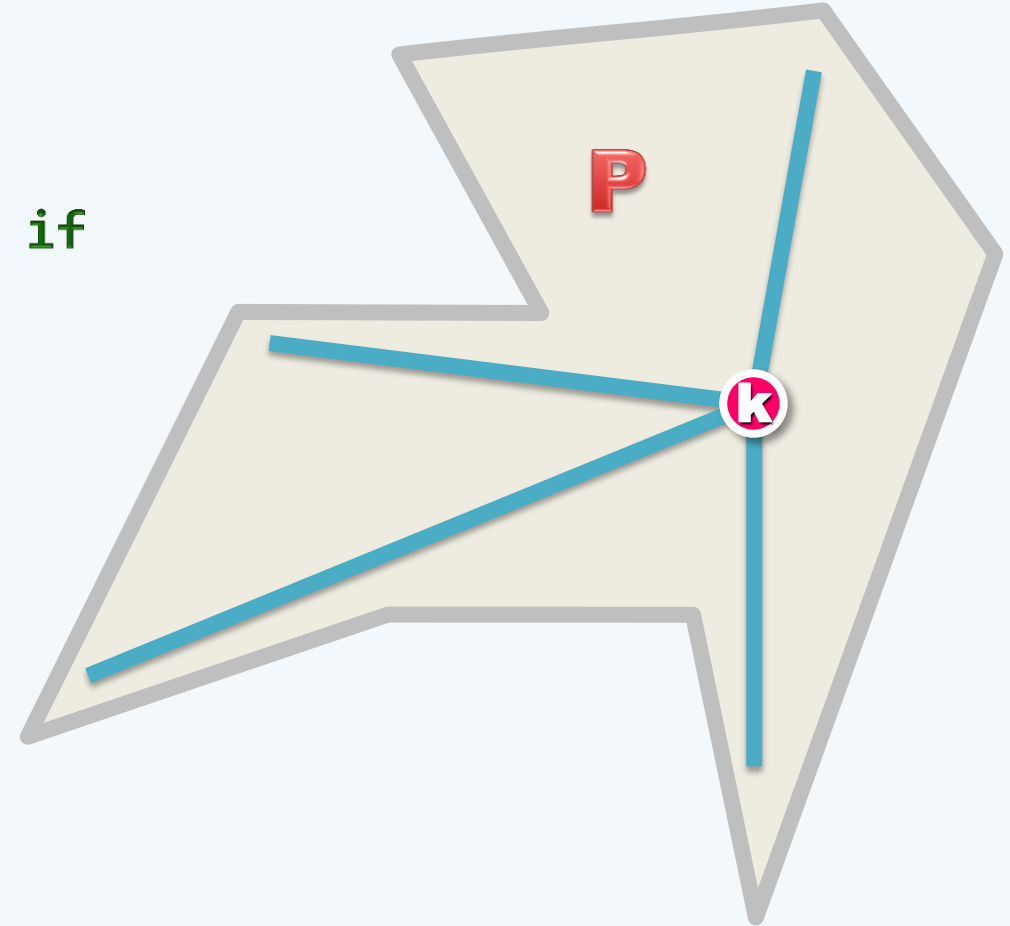
Kernel

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Visibility & Kernel

- ❖ Let P be a polygon in the plane
- ❖ Two points p and q are called visible to each other w.r.t. to P if the segment pq is entirely contained in P
- ❖ The kernel of P consists of points visible to the interior of P
- ❖ P is called star-shaped if it has a non-empty kernel



Algorithm

- ❖ $O(n)$ algorithm for simple polygons

D. T. Lee and F. F. P. Preparata,

An optimal algorithm for finding the kernel of a polygon,

J. Ass. Comput. Mach., 26(3), 415-421, 1979

- ❖ <http://dsa.cs.tsinghua.edu.cn/~deng/cg/demo/kernel/>