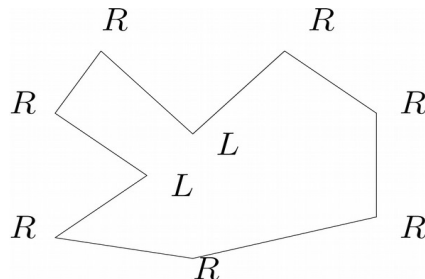
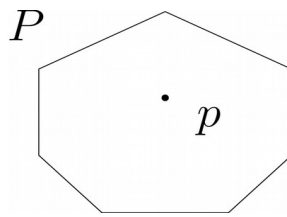


- Q1. Given a simple polygon (say, vertices are listed in clock-wise order):
- Print the vertices having a left turn (if any).
 - Print the vertices having a right turn.

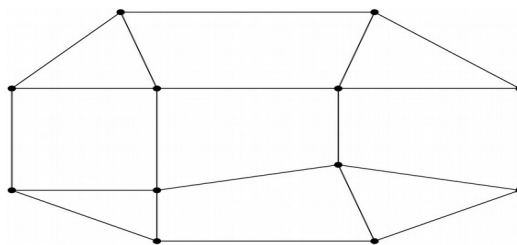


- Q2. Given a convex polygon P , you have to write a program to decide if an arbitrary point p lies inside P or not.



- Q3. Assume that you have ready DCEL structure (edge, face, vertex tables) for planar subdivisions (use the following figure). Write functions for the following:

- Given a vertex v , which vertices are the neighbors of v ?
- Given a face f , which other faces are having a common edge with f ?



- Q4. Write a program for randomized median finding (from a list of integers) with some relaxation d , allowing the median range $(m-d/2)$ to $(m+d/2)$ where m is the actual position of the median. Here, d is user input. Now, extend this median finding solution to write a Quick-sort procedure.