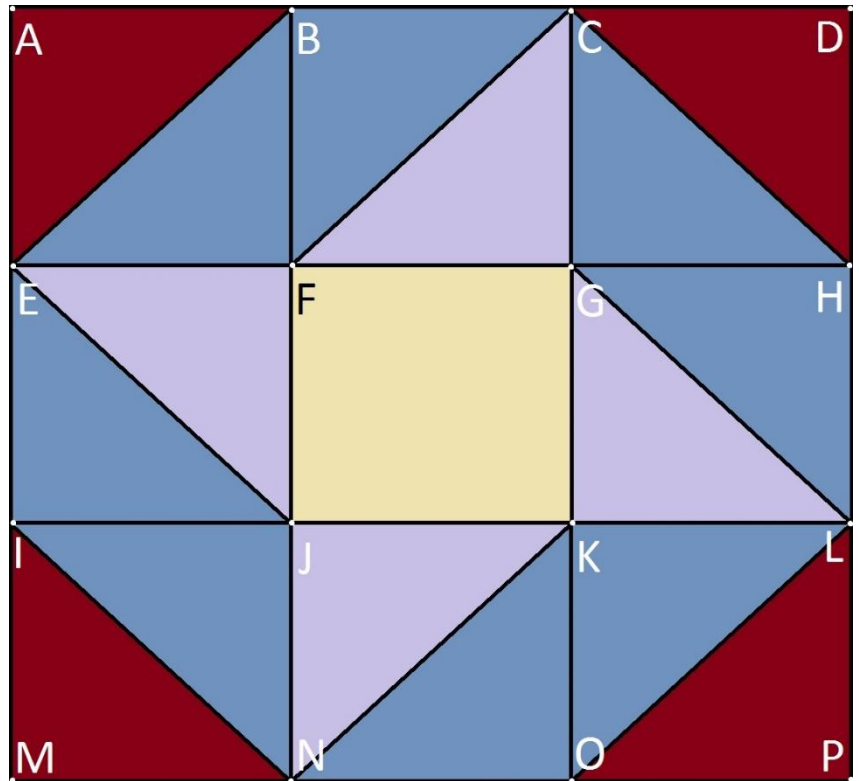


Optimal Quilting

Background

Karen is a quilter. With triplets on the way and a tenure-track position at Harvard, she doesn't have much time for hand-quilting. She has decided to opt for machine quilting for her baby quilts, which is much less time-intensive.

To save even more time, Karen would like to determine the best strategy for her quilt where she can use as few paths as possible. Each time Karen stops and then re-starts her sewing machine, she has to tuck the spare threads into the quilt, which is a pain. She has also noticed that if she sews a path fewer than 3 edges, the thread can fall out, so she wants to avoid short paths.



Question

Provide Karen with a quilting strategy such that she covers every edge exactly once and has to stop/start her sewing machine as few times as possible. Each path must be at least 3 edges in length. Extra points if the shortest path is greater than 3 edges.

Solution Requirements

A CSV list of paths, denoted by the vertex names, with a comma when the sewing machine must be stopped. For instance, to denote a path along the bottom of the quilt, write *MNOP*. The CSV could look like: *MNOP, NJFBC, DHGKL*, etc.