

Title: Randomized Minimum Cut Algorithm

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Introduction:

The graph is stored as a list of edges, where each edge connects two vertices.

The func function repeatedly reduces the graph until only two vertices remain.

In each step, it randomly selects one edge from the list. The two vertices of that edge are then merged into a single vertex. All edges that pointed to the removed vertex are updated to point to the new one. After merging, self-loops are removed to keep the graph valid.

This process continues until only two vertices are left in the graph. The number of remaining edges then represents one possible cut value. In main, the graph is read from input.txt. Finally, the cut value found is written to output.txt.