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Editing a Graph into a Clique and Isolated Vertices

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We are given a graph $G = (V, E)$ and do the following:

- We partition V in two disjoint sets C and I.
- We insert all missing edges in C, that is, we make C a clique.
- We delete all edges incident to I; thus, all vertices in I become isolated.

The objective is to find a partitioning that minimizes the total number of edge modifications (insertions and deletions).

Is this problem NP-complete?

In the case that the size of C is given as part of the input, an easy reduction from Clique shows NP-completeness. But this does not yet imply NP-completeness of the problem as specified above, where the size of C is arbitrary. We also mention the following equivalent problem formulation: Find a set $C \subseteq V$ such that the subgraph induced by C maximizes the number of edges minus the number of non-edges.