

To show that $\text{ISO} \leq_k \text{SUBGRAPHISO}$, use proof by construction. For this problem, when ISO returns false for graph G1 and G2, SUBGRAPHISO may return either true or false for G1 and G2. In this case, since the graphs can't be ISO no matter what, then the instances should be false for SUBGRAPHISO directly. But when ISO returns true for graph G1 and G2, then SUBGRAPHISO will definitely return true for G1 and G2, since G2 is a subgraph of itself, and this subgraph is isomorphic to G1. So it's like:

ISO(G1, G2)

if ISO(G1, G2) **then return** SUBGRAPHISO(G1, G2)

else return false