1. Obtain an algorithm for 3-Hitting Set running in time $\mathcal{O}^*(2.4656^k)$ using iterative compression.

2. An undirected graph G is called *perfect* if for every induced subgraph H of G, the size of the largest clique in H is the same as the chromatic number of H. We consider the Odd Cycle Transversal problem, restricted to perfect graphs. Show an algorithm with running time $\mathcal{O}^*(2^k)$ based on iterative compression.

3. Obtain a polynomial kernel for Disjoint Feedback Vertex Set.