

Solving MAX CLIQUE using exhaustive search

Suppose you want to solve MAX CLIQUE.

Given input graph $G = (V, E)$:

- ▶ Enumerate all subsets of V
- ▶ For each one, determine if it is a clique; if so, record size
- ▶ Return size of largest clique found.

Obviously correct, but too expensive. (How expensive?)

This is an example of **Exhaustive Search**