## Implementation of eliminate

```
Definition is_simplicialb (G : IFG) (r : reg) : bool :=
r \in G.V \land is\_cliqueb G[v].
 Definition find_next (G : IFG) : option reg :=
    find (is_simplicialb G) G.V.
 Definition eliminate_step (G : IFG) : option (reg * IFG) :=
let* u = find_next G in Some (u, G - u).
  Function eliminate (G : IFG) {measure |G.V|} : list reg :=
    match eliminate_step G with
    | Some (u, G') => in u :: (eliminate G')
   | None => []
    end.
```