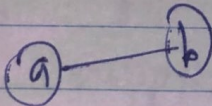


## \* Satisfiability of Equality Equations.

$$a == b$$

$$b != a$$



?

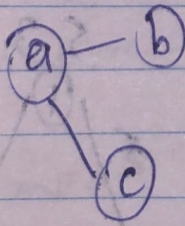
we can use union find.

$$a == b$$

$$a == c$$

$$b != c$$

for all  $==$  we build up a graph.



?

Then for all  $!=$  we check whether in same graph or different.