The task is to convert calcium carbonate to calcium hydroxide. It must be some kind of reaction where one of the reactants is CaCO<sub>3</sub> and one of the products is Ca(OH)<sub>2</sub>.

I know two ways how to do it. The first one is next conversation:

$$Ba(OH)_2 + CaCO_3 \rightarrow BaCO_3 + Ca(OH)_2$$

BaCO<sub>3</sub> is more not soluble than CaCO<sub>3</sub> that's why it is possible to get Ca(OH)<sub>2</sub>

Second way is to decompose  $CaCO_3$  by heating and then dissolve solid product (CaO) in water:

$$CaCO_3 \rightarrow CaO + CO_2 \uparrow$$

$$CaO + H_2O \rightarrow Ca(OH)_2$$