The task is to convert calcium carbonate to calcium hydroxide. It must be some kind of reaction where one of the reactants is $\mathrm{CaCO}_{3}$ and one of the products is $\mathrm{Ca}(\mathrm{OH})_{2}$.

I know two ways how to do it. The first one is next conversation:
$\mathrm{Ba}(\mathrm{OH})_{2}+\mathrm{CaCO}_{3} \rightarrow \mathrm{BaCO}_{3}+\mathrm{Ca}(\mathrm{OH})_{2}$
$\mathrm{BaCO}_{3}$ is more not soluble than $\mathrm{CaCO}_{3}$ that's why it is possible to get $\mathrm{Ca}(\mathrm{OH})_{2}$
Second way is to decompose $\mathrm{CaCO}_{3}$ by heating and then dissolve solid product $(\mathrm{CaO})$ in water :
$\mathrm{CaCO}_{3} \rightarrow \mathrm{CaO}+\mathrm{CO}_{2} \uparrow$
$\mathrm{CaO}+\mathrm{H}_{2} \mathrm{O} \rightarrow \mathrm{Ca}(\mathrm{OH})_{2}$

