**2 pts: Make one Hypothes.is annotation on an external source concerning the content of this chapter and tag it s20iostpy06ualr**

**Individual Homework Activity: (15 pts)**

In a process for producing acetic acid (CH3CO2H) , oxygen gas (O2) is bubbled into acetaldehyde (CH3CHO), containing manganese(II) acetate as a catalyst under pressure at 60°C

2CH3CHO(*l*) + O2(*g*) 🡪 2 CH3CO2H(*l*)

Write a Python program that uses functions to determine how many grams of acetic acid can be produced for any number of grams of acetaldehyde and oxygen used as inputs. Keep in mind that this is a “limiting reagent” problem. You might have more moles of oxygen or acetaldehyde used as inputs.

Your program must use functions for determining moles of input acetaldehyde, input oxygen, determining which the lesser number of moles is and output in grams of acetic acid. Keep in mind that the stoichiometry of the equation matters in your calculations. Also report all numbers to 2 decimal places. You should also use if statements to report which is the limiting reagent.

Your program must contain documentation lines that describe your code any you need to upload this doc plus the .py file to your Google Drive folder.

