Preclass Assignment
CHEM 1100-General Chemistry I

Name: **#3**

Section: 31, TR   **Due Date: Thursday 1/23/2020**

1. Assume that carbon dioxide in a 2.00 L soda bottle is dissolved at a pressure of 2.07 bar. At 2.2 °C, the Henry's law constant for carbon dioxide dissolved in water is $0.068 \ \frac{\text{mol}}{\text{L bar}}$. Calculate the concentration of dissolved carbon dioxide in mol/L and the mass of carbon dioxide that can be dissolved in the bottle of soda at the given pressure.

2. Now assume that you open that bottle of soda at the same temperature and allow the pressure to equilibrate to the atmospheric pressure which is 0.993 bar. Calculate the concentration of dissolved carbon dioxide in mol/L and the mass of carbon dioxide that can be dissolved in the bottle of soda at this new pressure.