

### Sample Calculation for lab 01b

Two balls each of mass  $m=0.001\text{kg}$  are attached to a string of length  $L=1\text{ m}$ . The string is attached to a pin and the masses are allowed to hang on each side of the pin. If the **total angle of separation** between the two balls is  $10^\circ$ , what is the charge on each ball. You may assume the charge is the same on both balls.