Batch Distillation Pre-Lab Questions:

1. Compared to the continuous distillation, which line does not appear in batch distillation: stripping line or enriching line?

2. Write down the equation for the operating line for the total reflux condition.

3. Is it possible to reach steady state for a batch distillation at a certain finite reflux ratio? Briefly describe the reason.

4. What is the reason to run the total reflux first in the batch distillation experiment?

5. Is there a minimum reflux ratio for the batch distillation? If so, how to determine it experimentally?

6. What would happen if we run a batch system at a reflux ratio lower than the minimum reflux ratio?