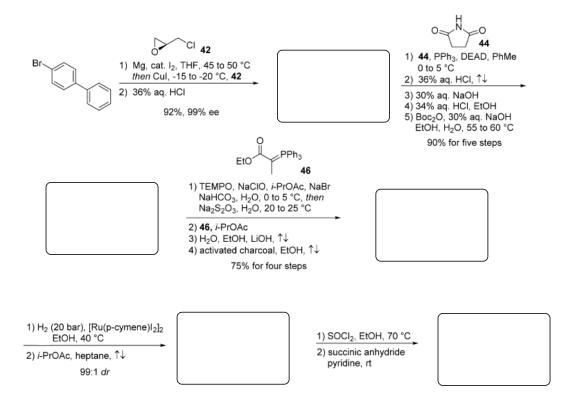
Exam A

1. Provide the reagents for the following transformation:

2. Provide the products for the following transformation:



3. Please provide the retrosynthetic analysis and forward synthesis of the following compound using the starting material A and any other compound with four or less carbon atoms.