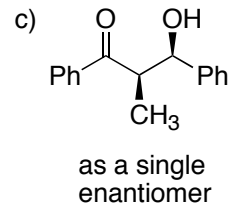
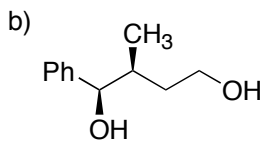
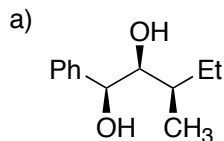
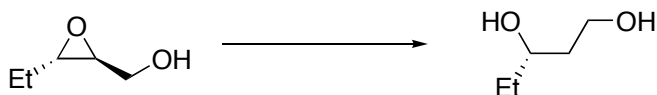
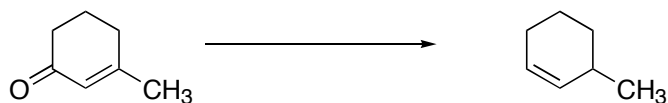
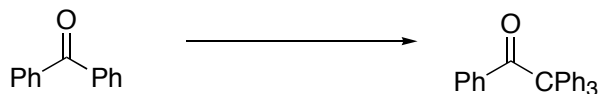
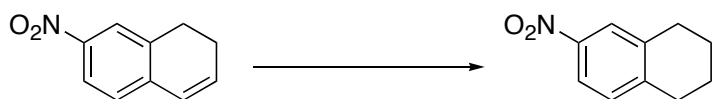


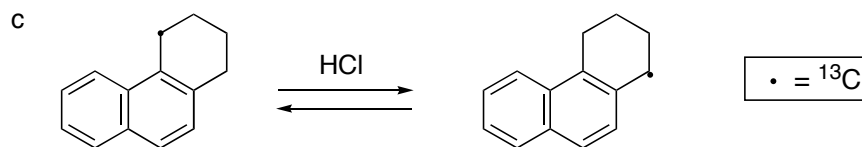
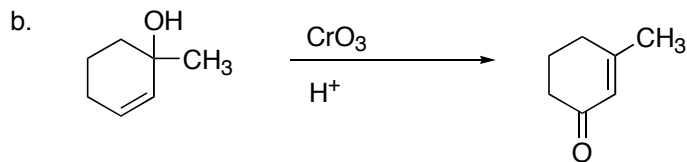
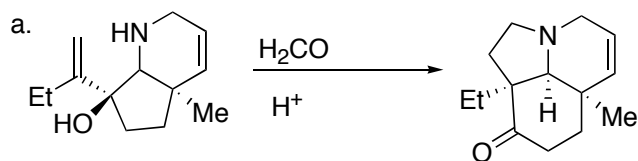
1. Outline syntheses from commercial materials. Provide a literature reference for each step, (20 pts)



2. Provide Reagents for the following transformations



3. Provide detailed arrow pushing mechanisms



4. Complete the tutorial database handout #5. List three different sets of conditions for selectively cleaving a methyl ester in the presence of an Fmoc group.