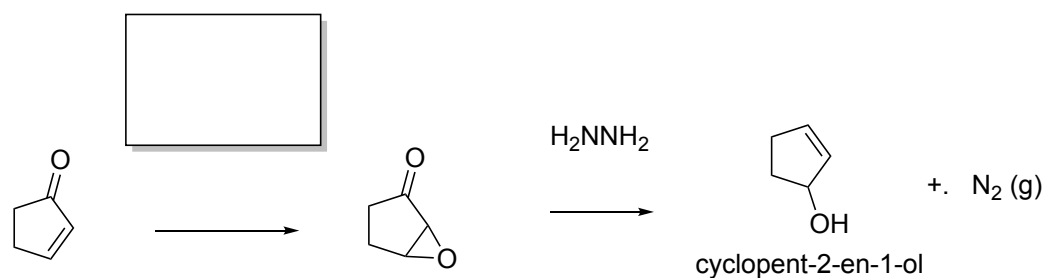


Assignment #6 (Due Apr 8, 2024)

Chem 436 – Spring 2024

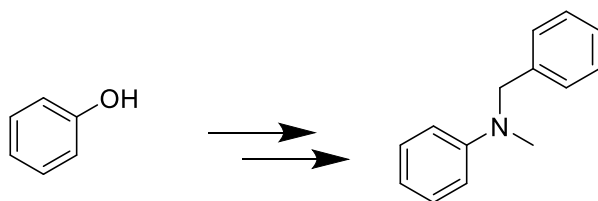
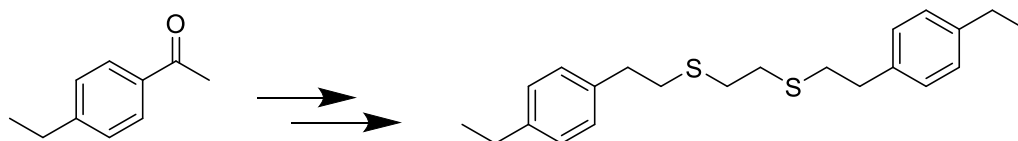
1)



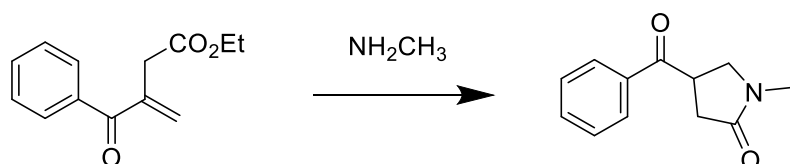
a) Identify the reagent / conditions to obtain the epoxide shown above.

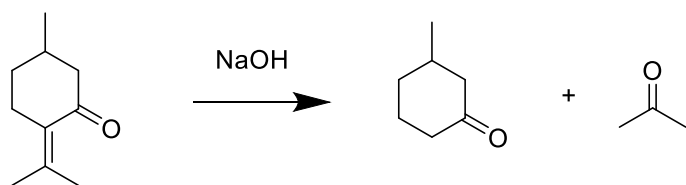
b) Propose an arrow pushing mechanism to obtain cyclopent-2-en-1-ol starting from the epoxide intermediate. (HINT: has similarities to the Wolff-Kishner Reaction)

2) Propose a route for the following synthesis.



3) Draw the complete curved arrow pushing mechanism for the following reactions.





4) Starting from ANY reagent, come up with two multistep reaction sequences that must be at least five steps long. At least one reaction must be from material covered after the MT2 cut-off.

a)

b)

5) Were you satisfied with how do you think you did in Midterm #2? What changes will you make to improve your results?