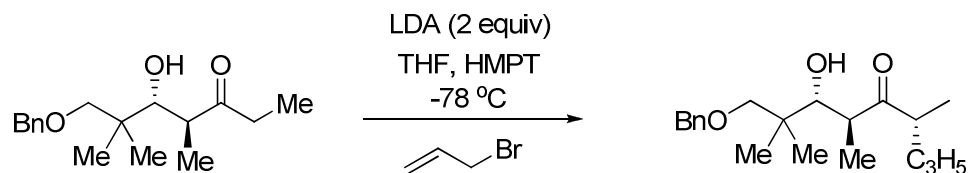


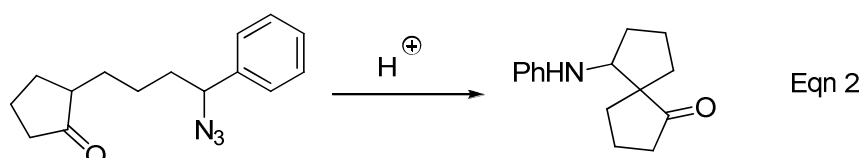
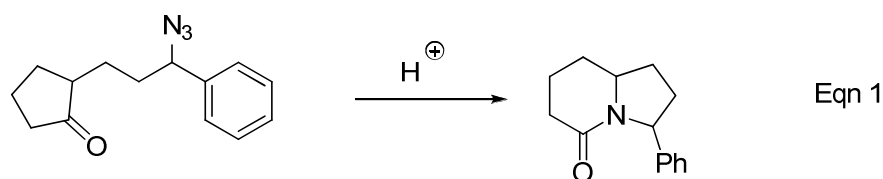
Problem set Monday 7th February

Please provide answers for questions 1-7.

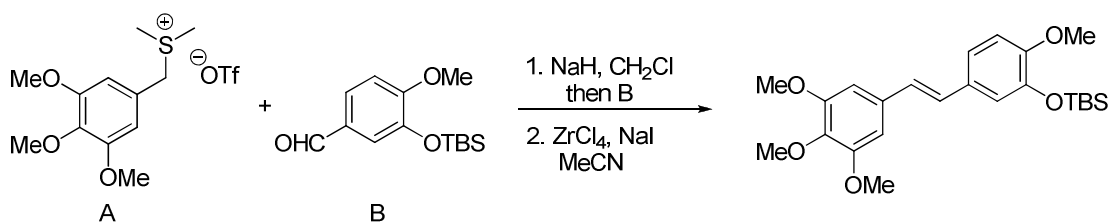
1. Rationalise the stereochemical outcome of this alkylation reaction.



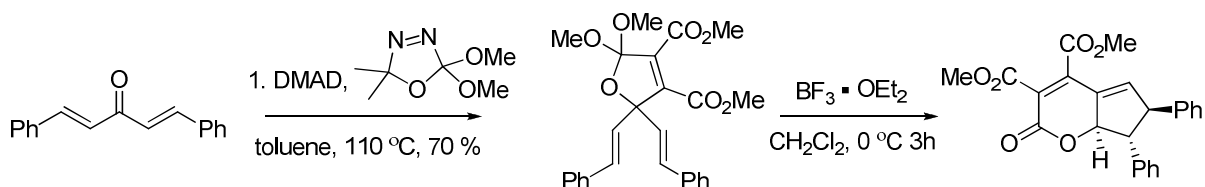
2. Provide mechanisms for the transformations illustrated in Eqn 1 and Eqn 2. Briefly rationalise the difference in reactivity.



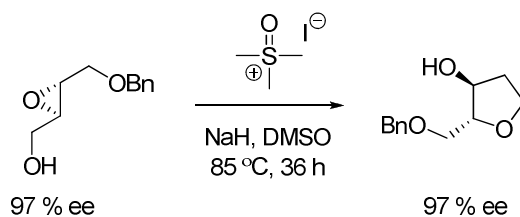
3. Provide a mechanism for the following transformation.



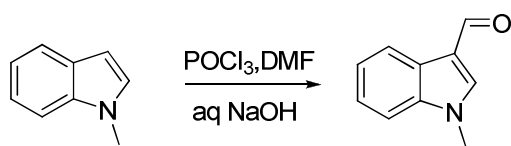
4. Provide a mechanism for the following transformation.



5. Provide a mechanism for the following transformation.



6. Provide a mechanism for the following transformation.



7. Provide a mechanism for the following transformation.

