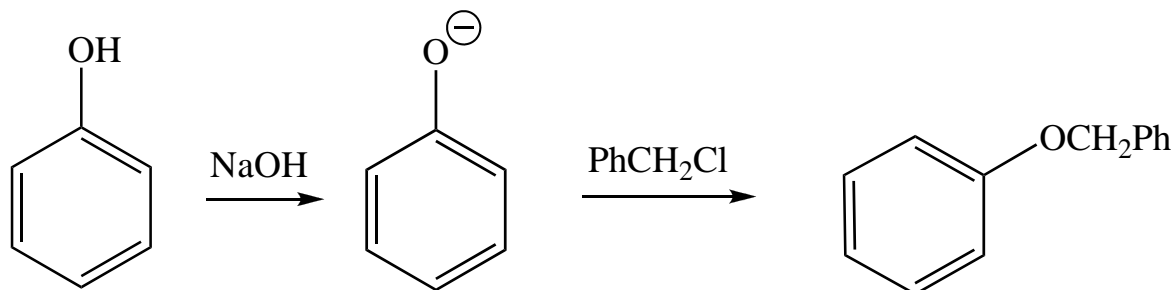


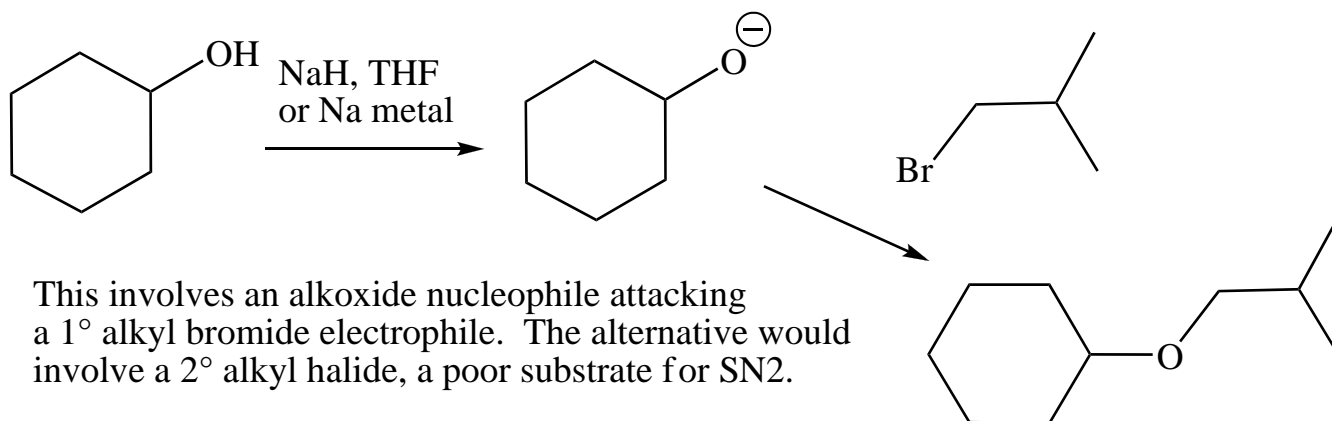
Exercise 63A - Ethers

Question One

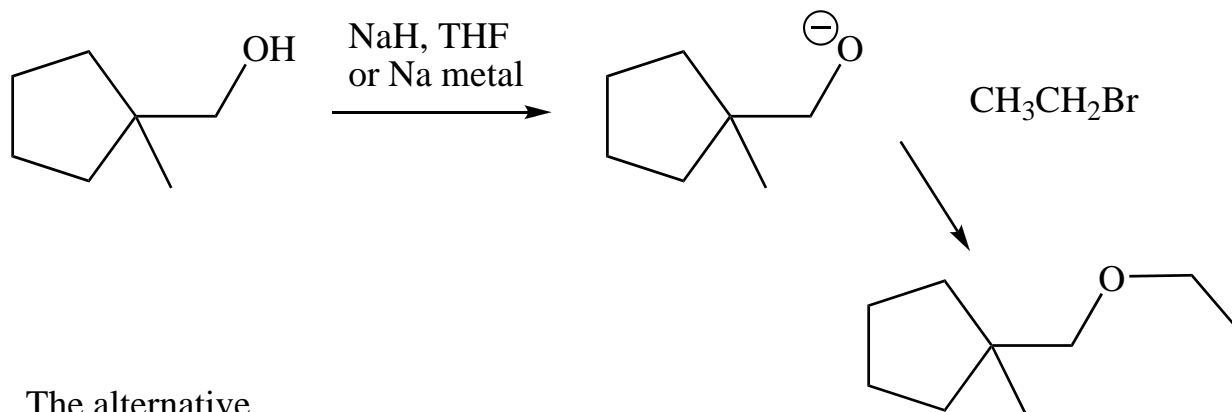
How would you prepare the following ethers via the Williamson Ether Synthesis?



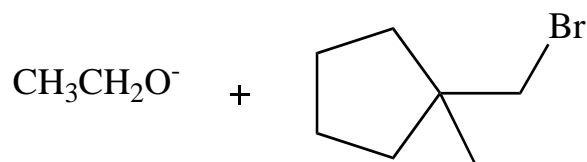
Phenol is sufficiently acidic that NaOH can be used. Note that use of an aryl halide as the electrophile in the S_N2 reaction is not possible.



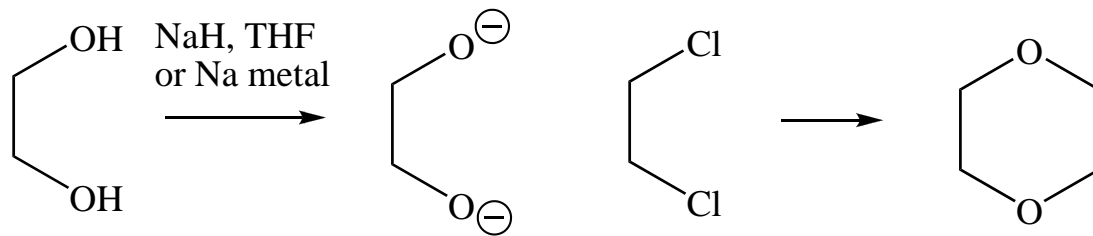
This involves an alkoxide nucleophile attacking a 1° alkyl bromide electrophile. The alternative would involve a 2° alkyl halide, a poor substrate for S_N2.



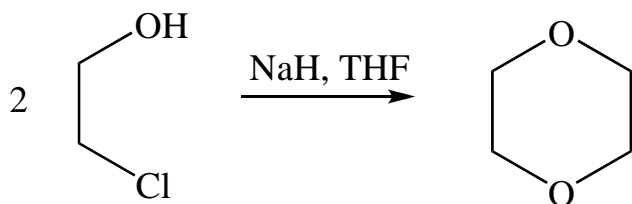
The alternative...



won't work because the alkyl halide, while 1°, is neopentyl (has three β-branches).



This alternative...



might be complicated by the formation of



Question Two

Offer a mechanism for the following process.

