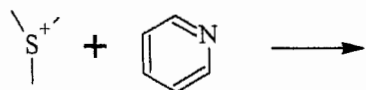
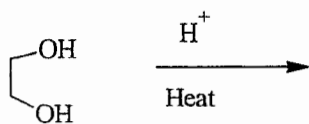
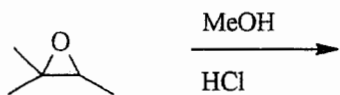
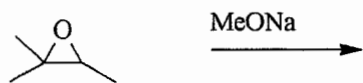
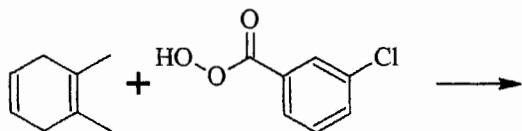
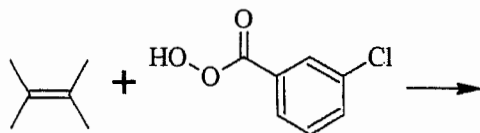
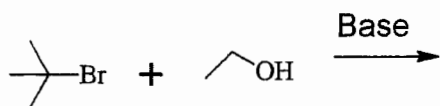
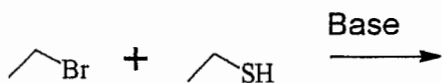
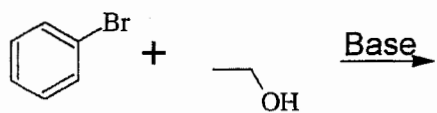
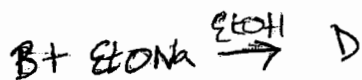
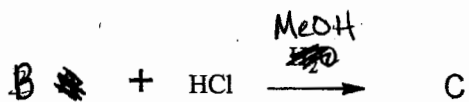
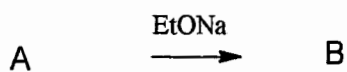
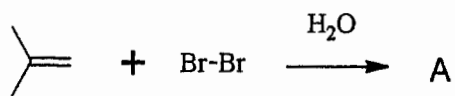


Please provide the products from the given starting materials and reaction conditions. If no reaction occurs, write NR.



Please provide a mechanism for the following reactions. Your proposed mechanism should account for the observed regioselectivity.



Please provide a reasonable stepwise mechanism to account for this transformation.

