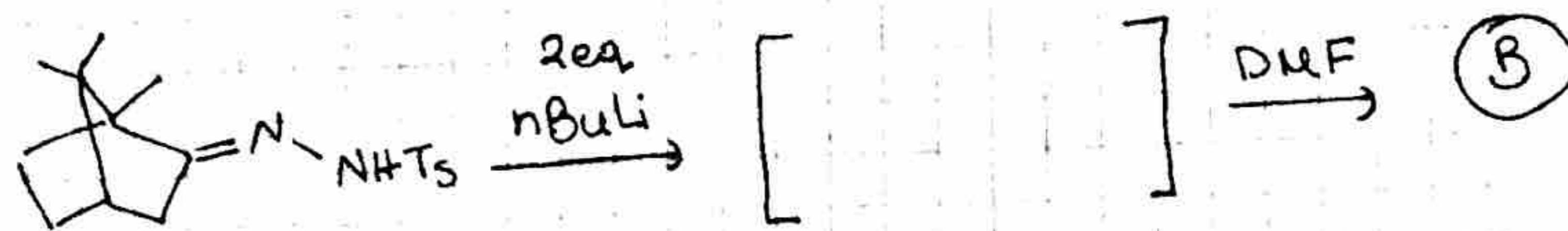
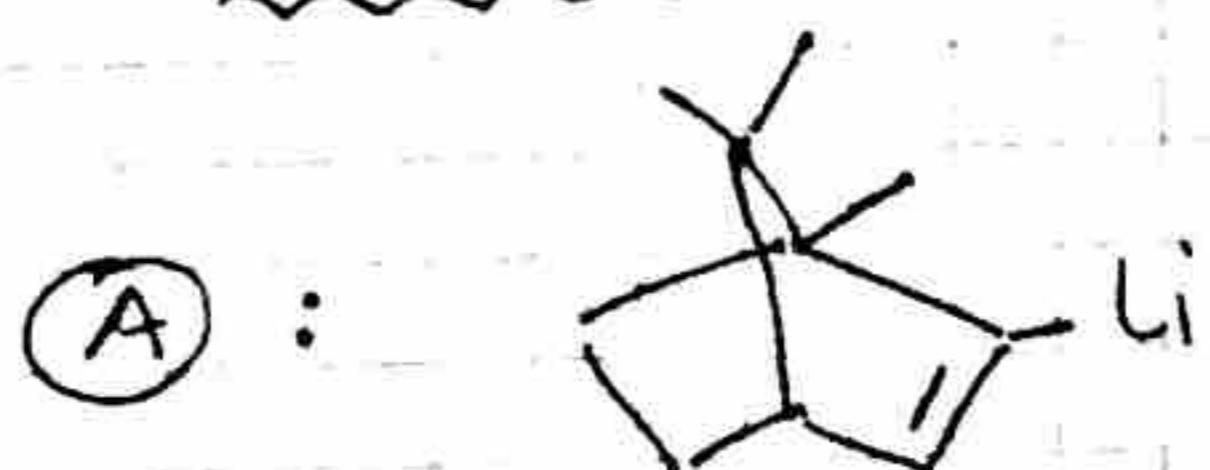


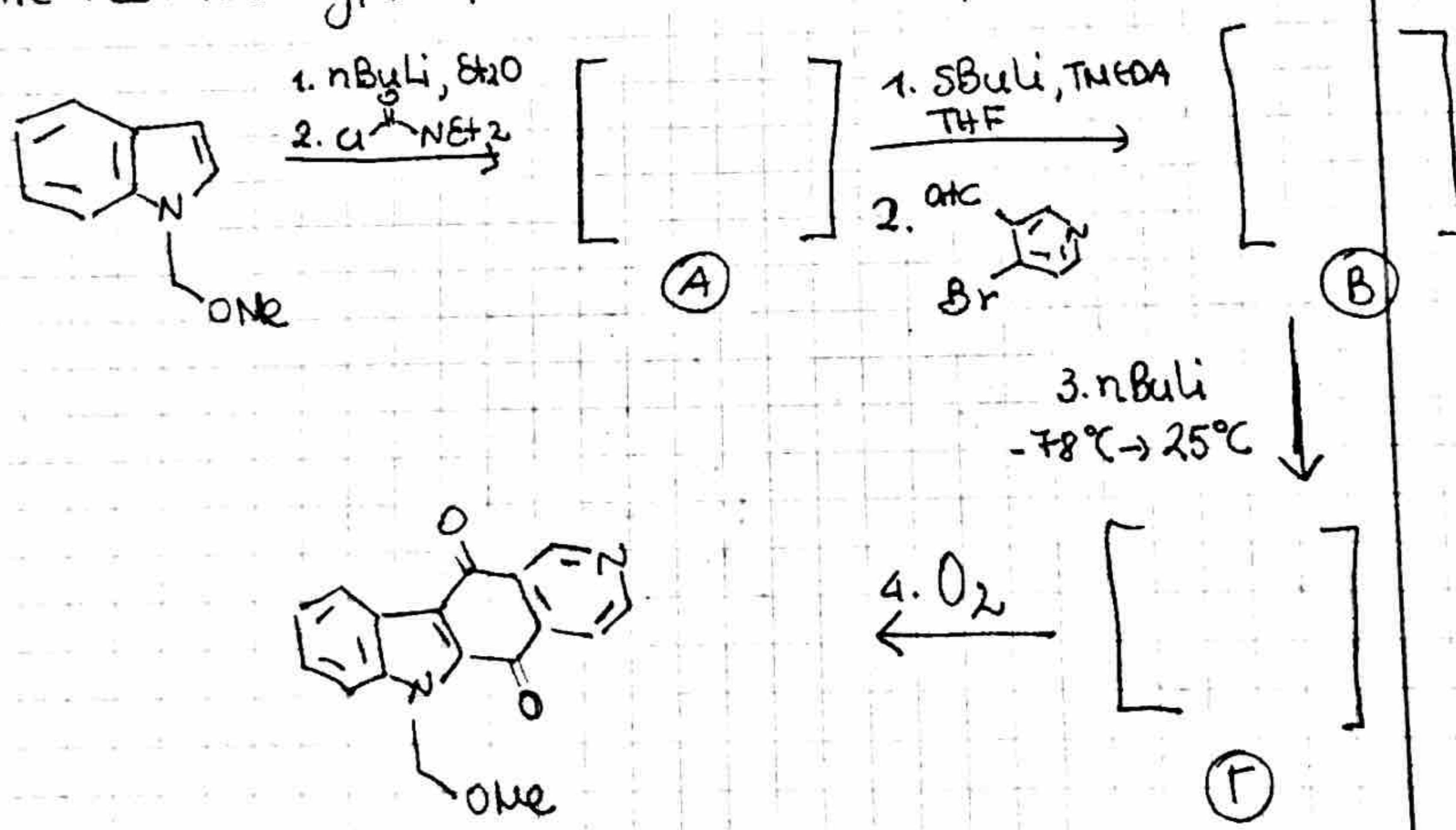
3. Complete the following reaction:



→ Solution:



4. Complete the following sequence and classify the reaction type of the lithiation steps.



→ Solution: 1. Directed orthometalation
2. Directed orthometalation
3. Halogen-Lithium exchange

