Problems: Suggest suitable mechanism for the following transformations
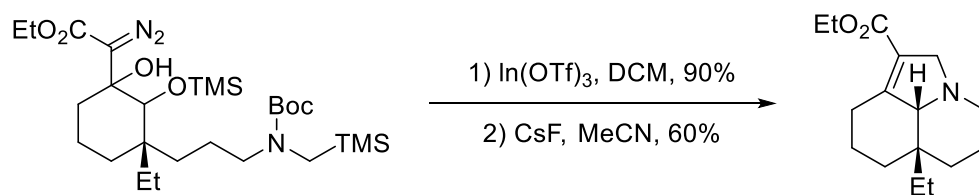
1.

1) In(OTf)$_3$, DCM, 90%

2) CsF, MeCN, 60%

2.

CuBr.SMe$_2$ (1.1 equiv)
2,2'-bipyridine (1.1 equiv)

DMSO, 60 °C
O$_2$ (1 atm)

93%

Cu(OAc)$_2$ (20 mol%)
DABCO (50 mol%)
K$_2$CO$_3$ (2.0 equiv)

DMSO, 80 °C
O$_2$ (1 atm)

56%