ECEN 326
Homework #1

Due: 02-01-2022, 11:59PM
Homeworks will not be received after due.
Instructor: Sam Palermo

Solve the following problems from the Razavi text:
          5.5, 5.9, 5.12(a), 5.16(a), 5.28, 5.46, 5.52, 5.56, 5.58, 5.73, 5.83

In the above problems that require DC operating point calculations (5.9, 5.12, …), assume that V_{BE}=0.7V for the BJTs. Note, in some of the given problems, Razavi gives you an I_S value and wants you to iterate and find a more exact V_{BE}. I don't think that is worth your time, so again just use V_{BE}=0.7V.

Problem Edits
5.9 – Use β=50
5.12 – Assume the transition between Active and Saturation modes is with V_{CE}=0.3V. Don't do part (b).
5.16 – Don't do part (b)