EE230 Homework #1 (10 points)   Sept 11, 2018

Due: Oct. 4, 2018 4:00PM
Homework will not be received after due.

Goal of this homework is to learn the use of Cadence Spectre in RF circuit design.

Use the reference design described in "Cadence_pss_simulation.pdf"
that can be found in Canvas homeworks folder.

You are required to duplicate the materials presented in the reference document except the followings:

1. Use the device model nmos2v and pmos2v from gpdk045.
2. V_{DD} = 1.8V and you are free to change the component values.
3. Create a document similar to the reference document and answer the problem questions in the reference.

Design target is to meet the following key requirements for the LNA structure presented in the reference.

Gain > 20 dB
S11 < -15 dB
NF < 1.5 dB

You should submit the pdf file format of your homework via email to sang-soo.lee@sjsu.edu

File name should be EE230HW#1_Lastname_Firstname.pdf