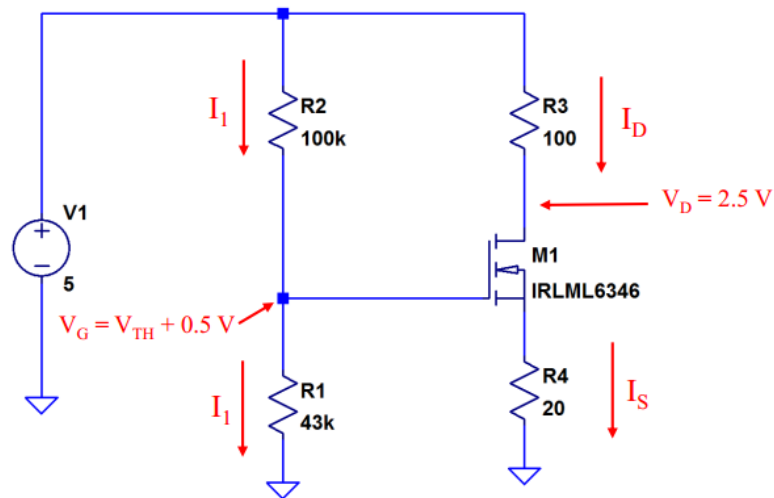


EE 312 LT-Spice HW#2

- 1) Consider the figure below.
- Obtain DC operating points of the transistor in LT-SPICE.
 - Obtain ' g_m ' value of the transistor in SPICE by using derivation of the DC points between each other. (For the operating I_D current.)
 - Calculate required C_{c1} and C_{c2} coupling capacitors in order to place f_L and f_H frequencies about 20Hz and 20kHz respectively. (Speech processing applications.)



Due Date: 05.04.2018

- 2) Consider the circuit below. Calculate I_E , A_v , Z_{in} and Z_{out} . After that, obtain these values in the LT-SPICE using transistor model as illustrated in the figure below. Show all your plots and calculations. Compare your results. Comment on them.

