1) Find the datasheet for the BurrBrown OPA334.
   a) What is the common mode input range, and what does this tell you about the
      opamp topology?
   b) What is the low frequency gain, in dB and volts/volt?
   c) What is the phase margin for unity gain feedback?
   d) What is the output swing with 1mA of output current at 25°C?
2) Find the datasheet for the BurrBrown OPA340.
   a) What is the common mode input range?
   b) Based on the simplified schematic, and assuming that Vbias1 and Vbias2 are set
      to keep the cascades in saturation, sketch Gm for the input stage vs. the common
      mode input voltage from rail to rail. Define Gm in this case as (the differential
      current flowing into the output stage controller) divided by (the differential input
      voltage).
   c) What circuit addition does the datasheet recommend to drive large capacitive
      loads?
3) Design a unity-gain-stable folded cascode op-amp which can swing to within 300mV
    of both rails over a single-sided supply range of from 2 to 15 volts. You may use at
    most 1 resistor in your design - all other devices must be MOSFETs. Verify the
    performance of your amplifier with Bode plots at operating points 300mV from each
    rail at both min and max supply voltage. What is the lower limit on your supply
    voltage? Why?