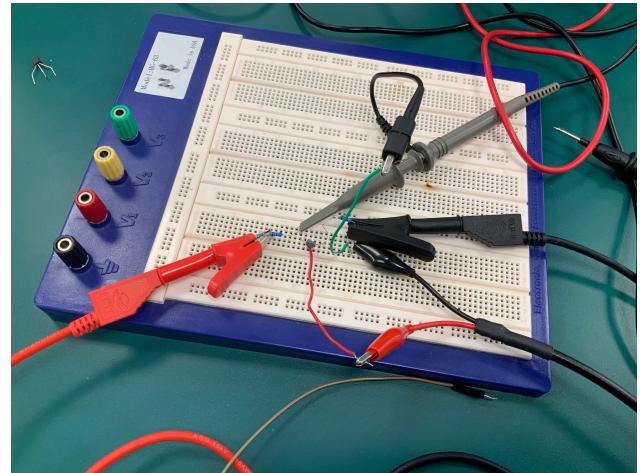
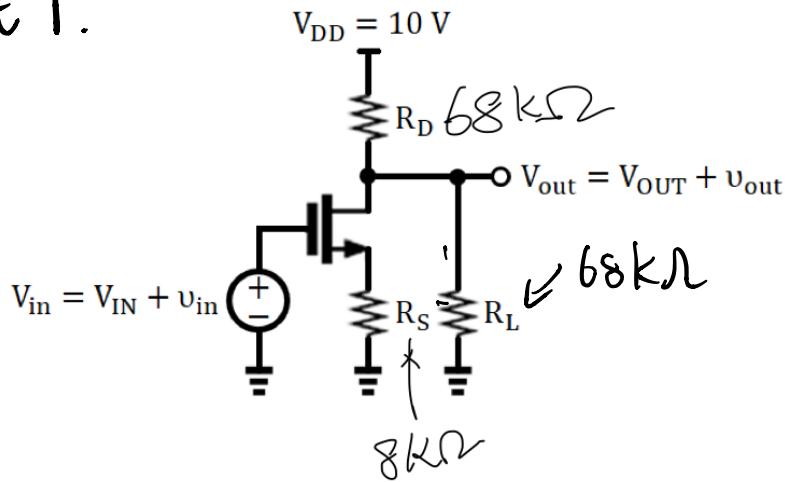


Part 1.



You can decide D, S, G of NMOS by referring to:

Pin Configuration



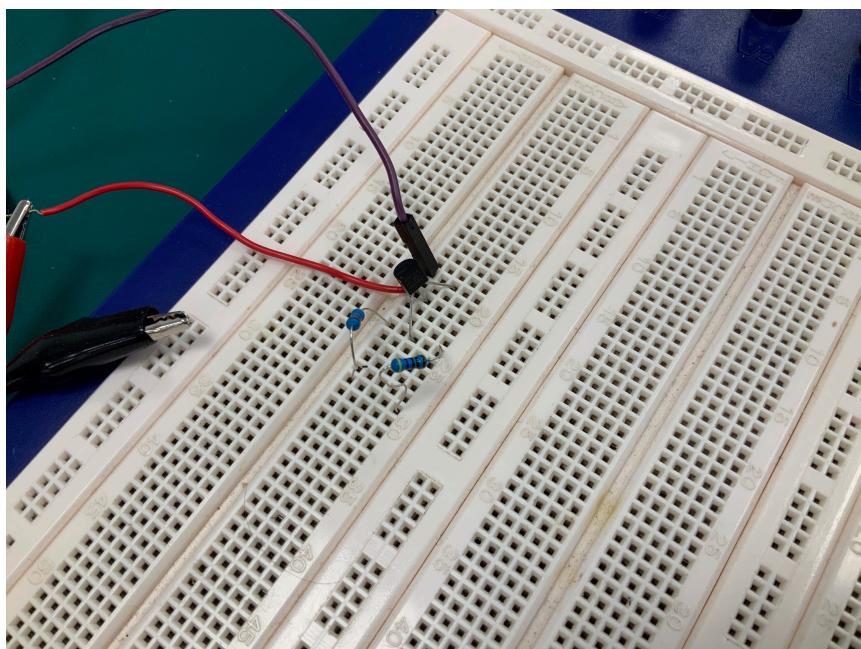
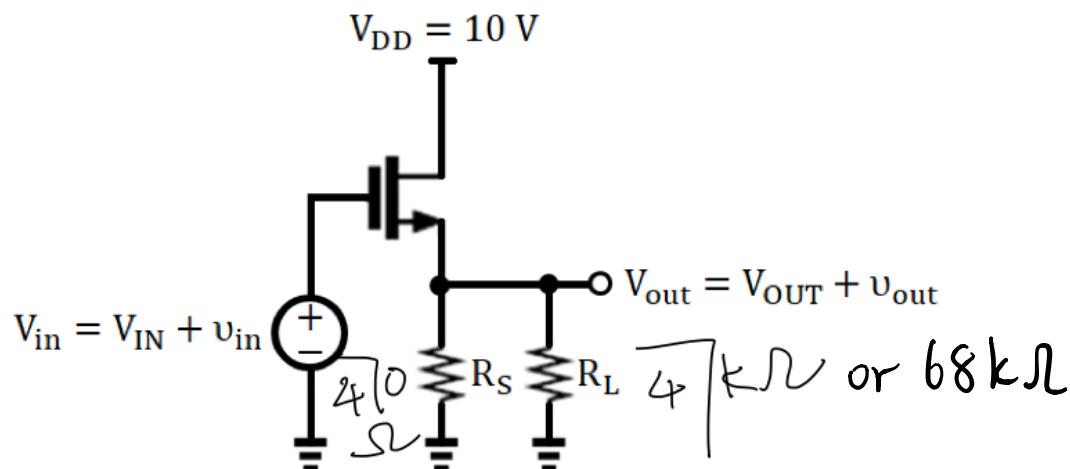
1. a : You need to set V_{in} at different DC voltages, for example $0.1, 0.5, 0.6, 0.7, 0.8, 1, 1.5$ and measure V_{out} correspondingly .

$A_v \approx \frac{V_{out_1} - V_{out_2}}{V_{in_1} - V_{in_2}}$, make sure $A_v > 5$, record V_{IN} .

You should expect :
choose a V_{in} in this region.

1. b . Set V_{in} to a sin wave, the offset is the V_{IN} you get in 1.a . Verify the A_v by dividing $\frac{V_{PP}}{0.02}$
1. c . Connect R_L . You should expect A_v to become smaller.

2.



The step is similar to 1. You should expect the DC sweep to be :

