

Rohan Rajesh Kalbag Roll: 20d170033

R_g was found as 3.5k in design, so the closest value of 3.3k was taken.

q2c) The handdrawn sketch has a V_{out} of 4V at V_{in} of 400mV, but in the experimental one for a V_{in} of 400mV we are getting V_{out} of about 3.52V, also the handdrawn sketch has V_{out} of 0V for V_{in} of 650mV, the experimental one has also a similar behaviour, at ~650mV input the output voltage is 0.02V ~ 0V. There is discrepancy in the output voltage at 400mV, this is because the Opamp supply voltage is -5 to 5 V and 4V is very close the V_{cc} , if a higher dc voltage was given as power supply to Opamp, the V_{out} would be much closer to 4V than it is currently which is 3.52V.