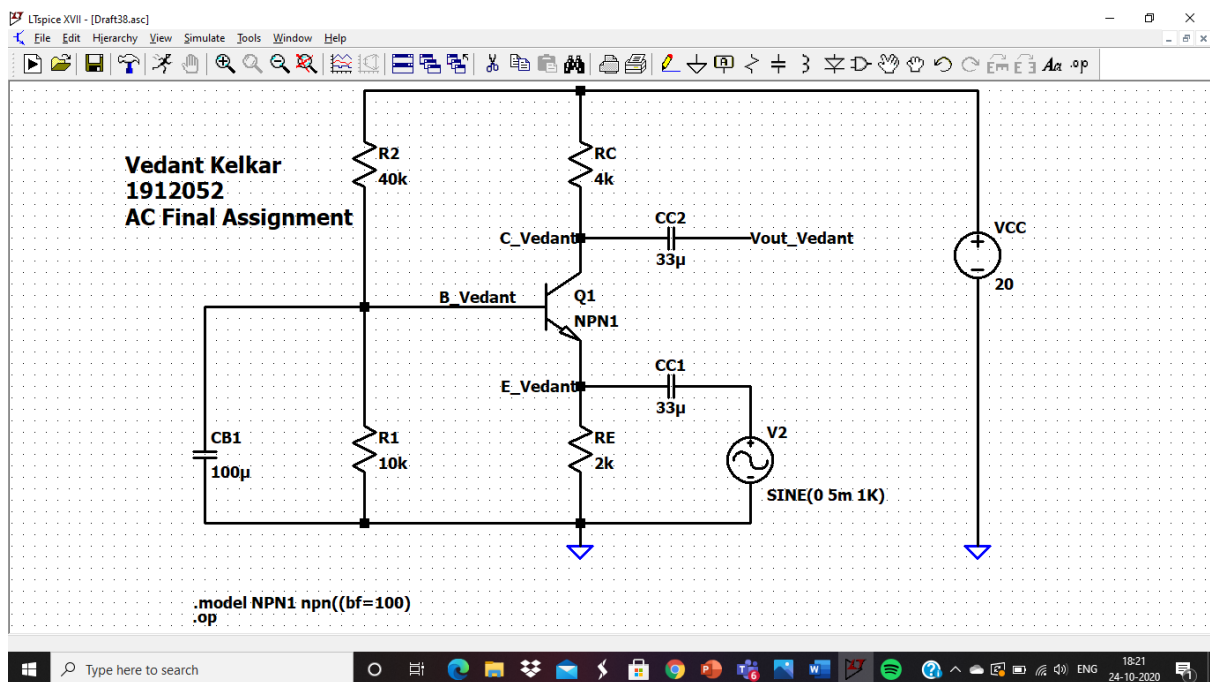


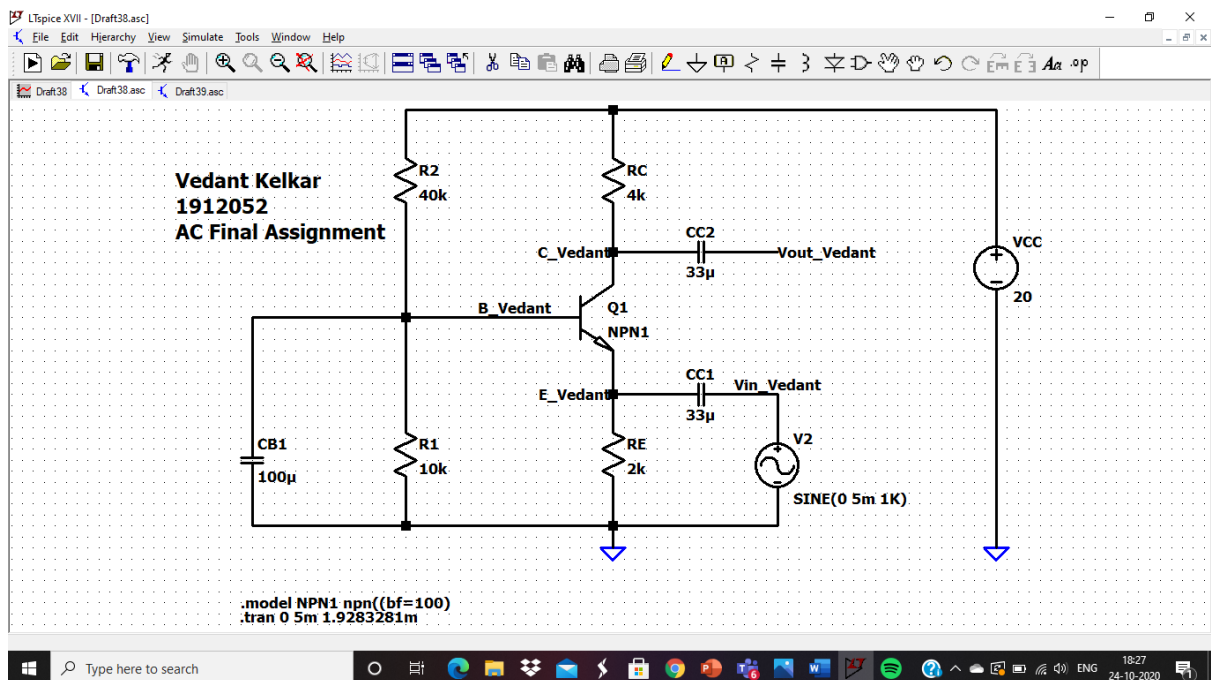
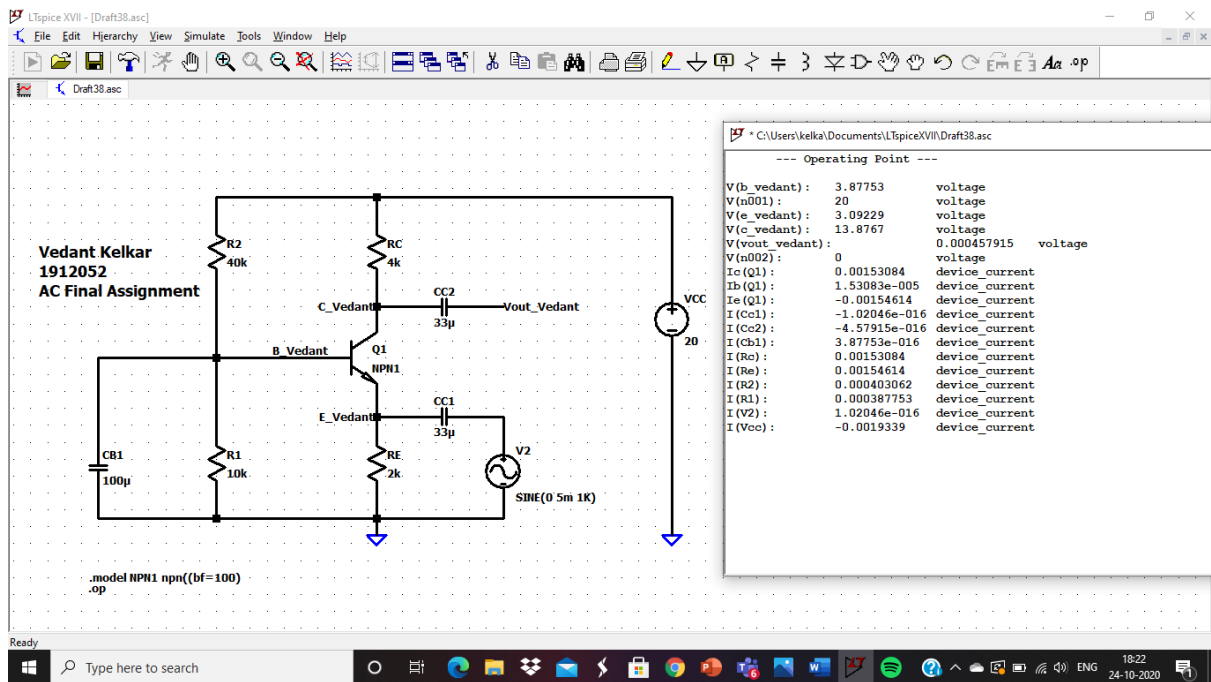
AC Final Assignment

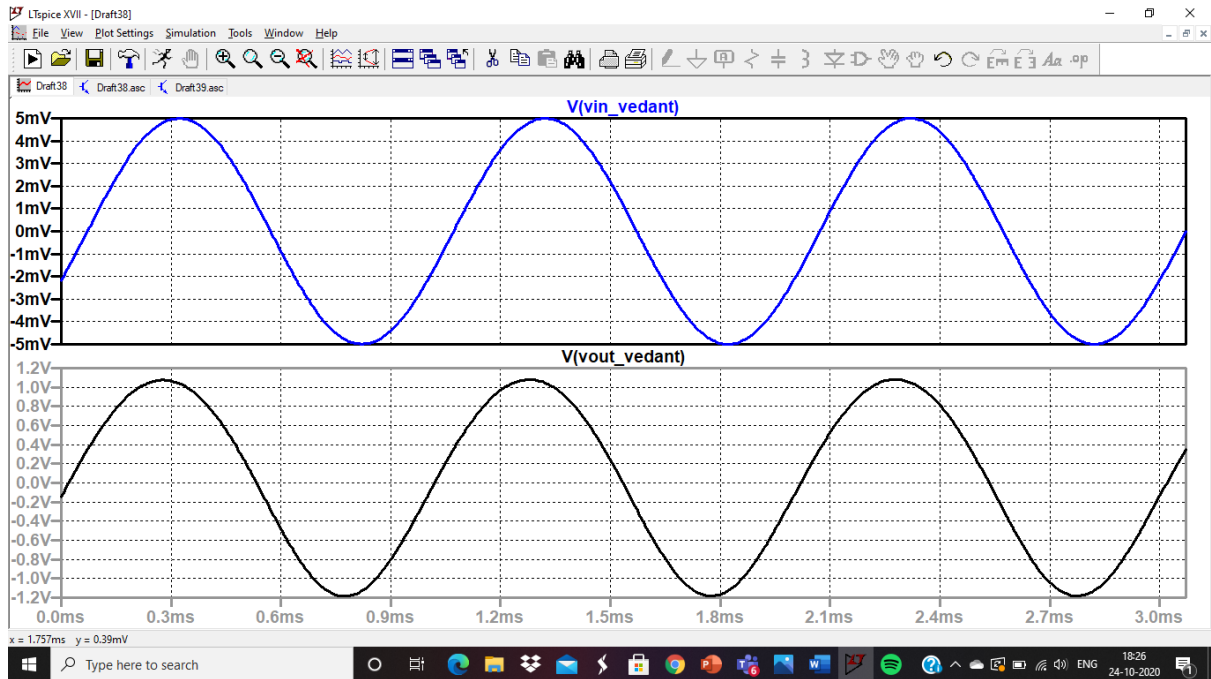
Vedant Kelkar

SY ETRX B 1912052

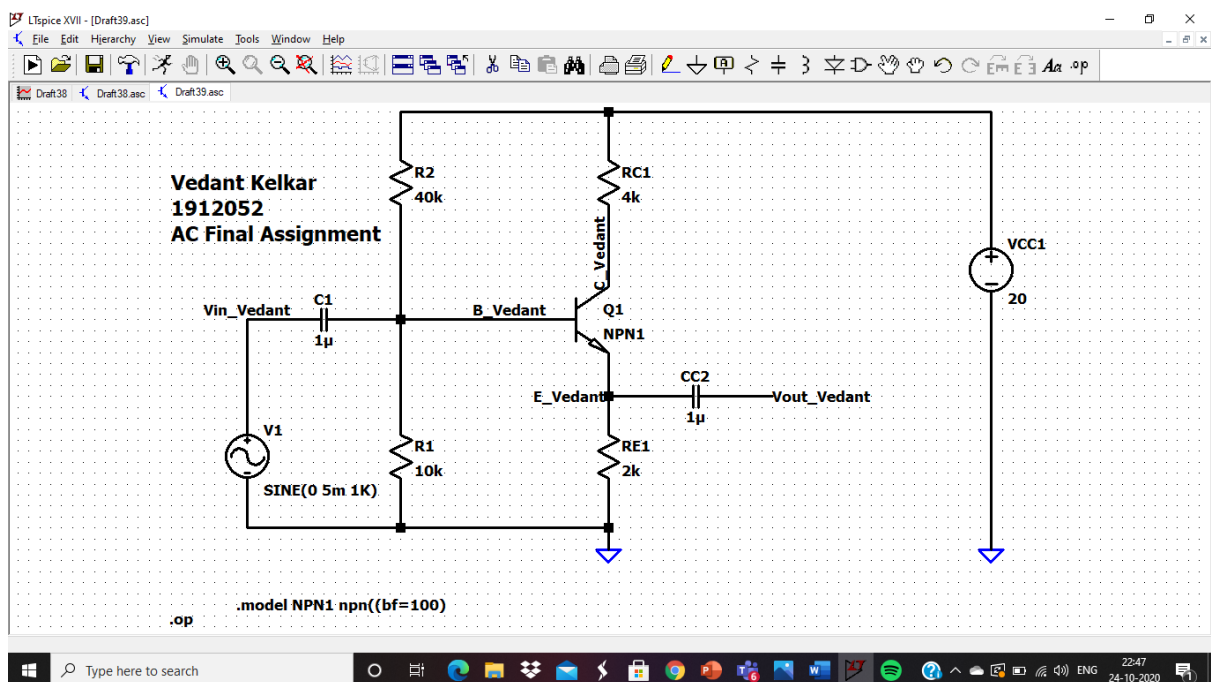
TASK 1

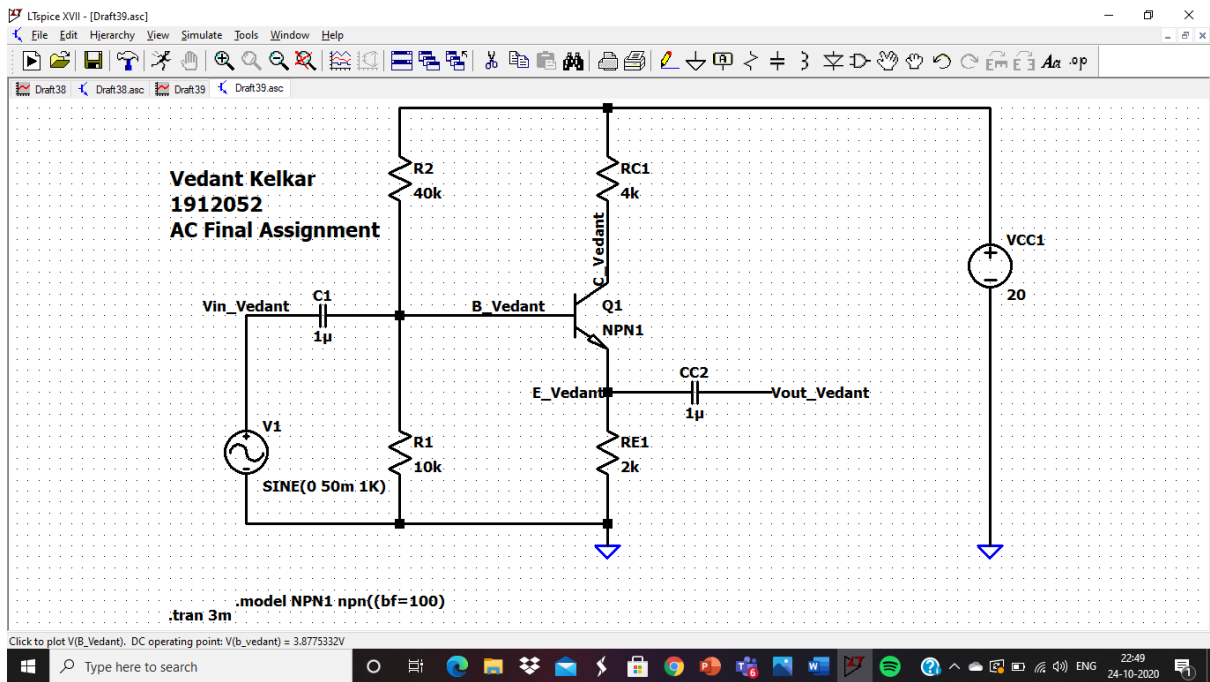
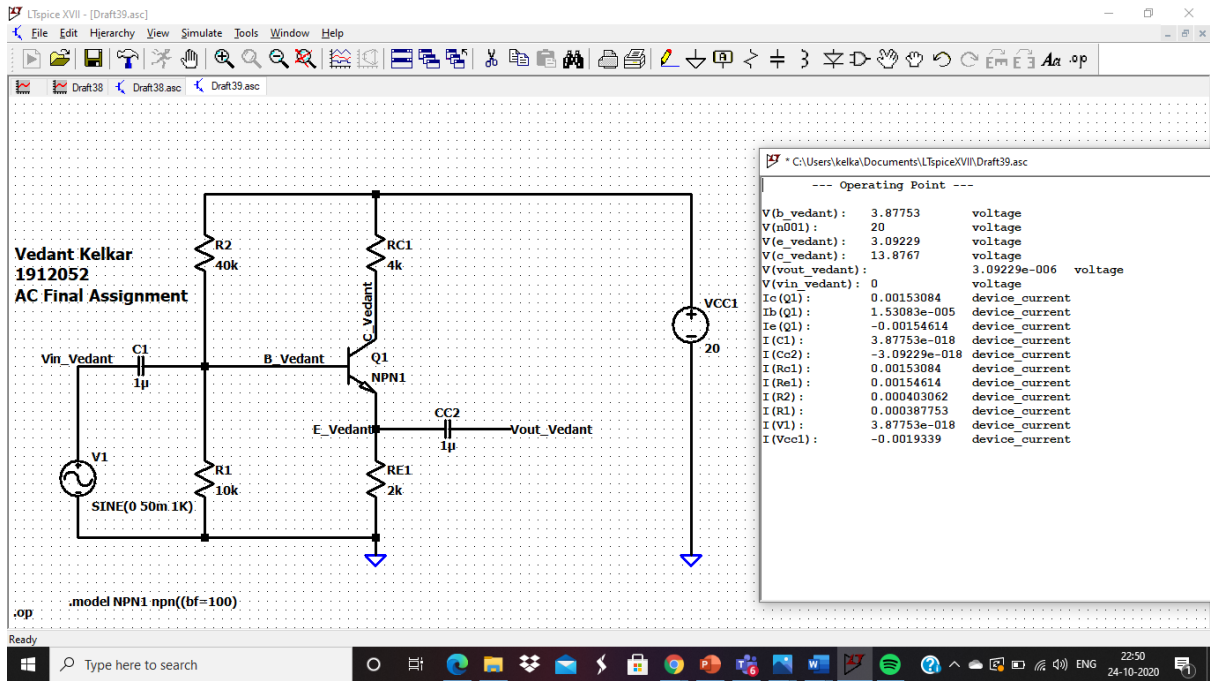


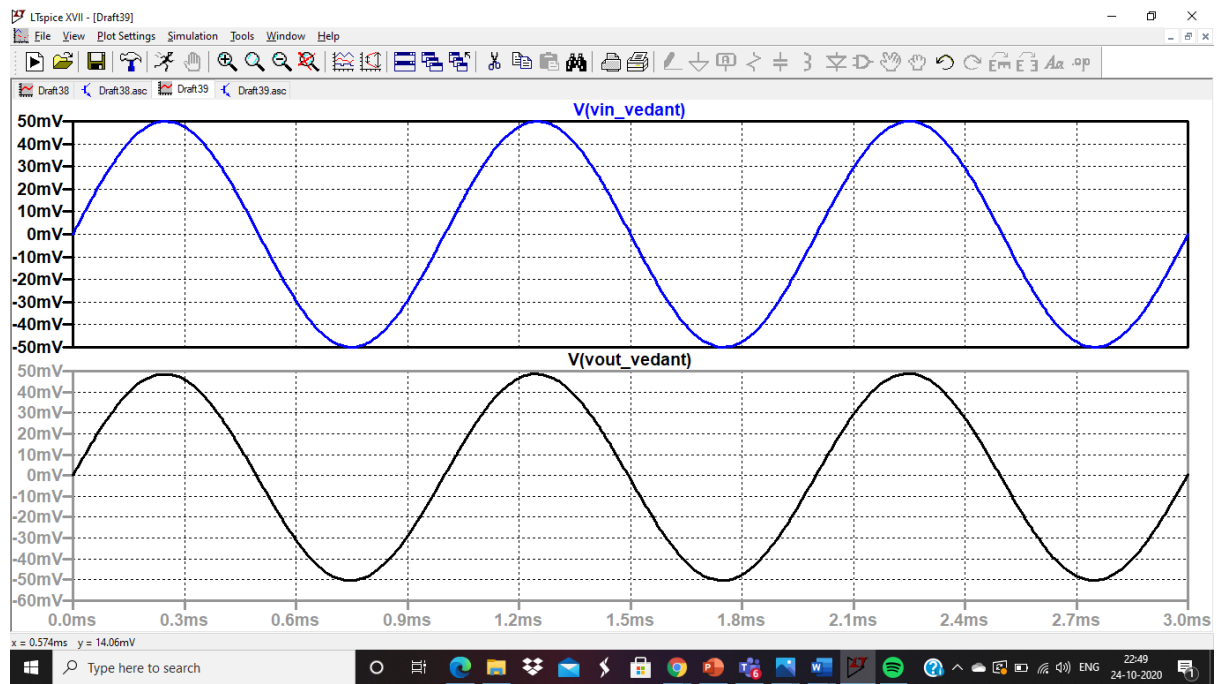




Vin	Vout	Av(Theoretical)	Av(simulated)
10mV	2.261V	241.68	226.1

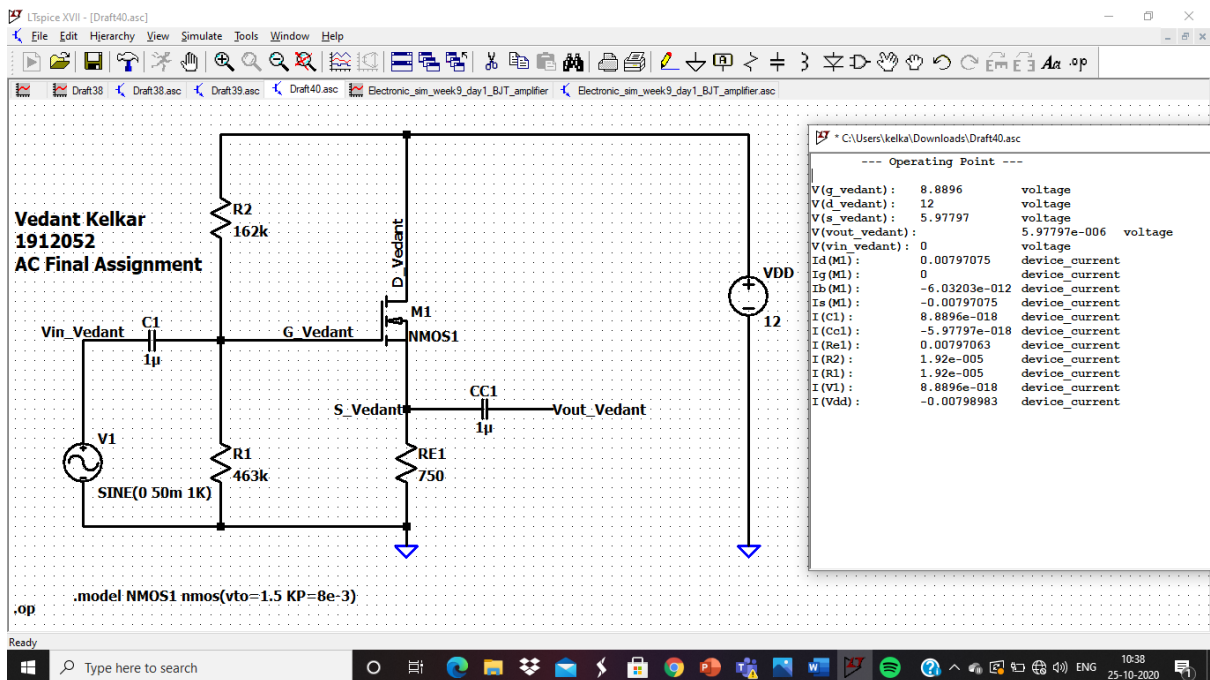
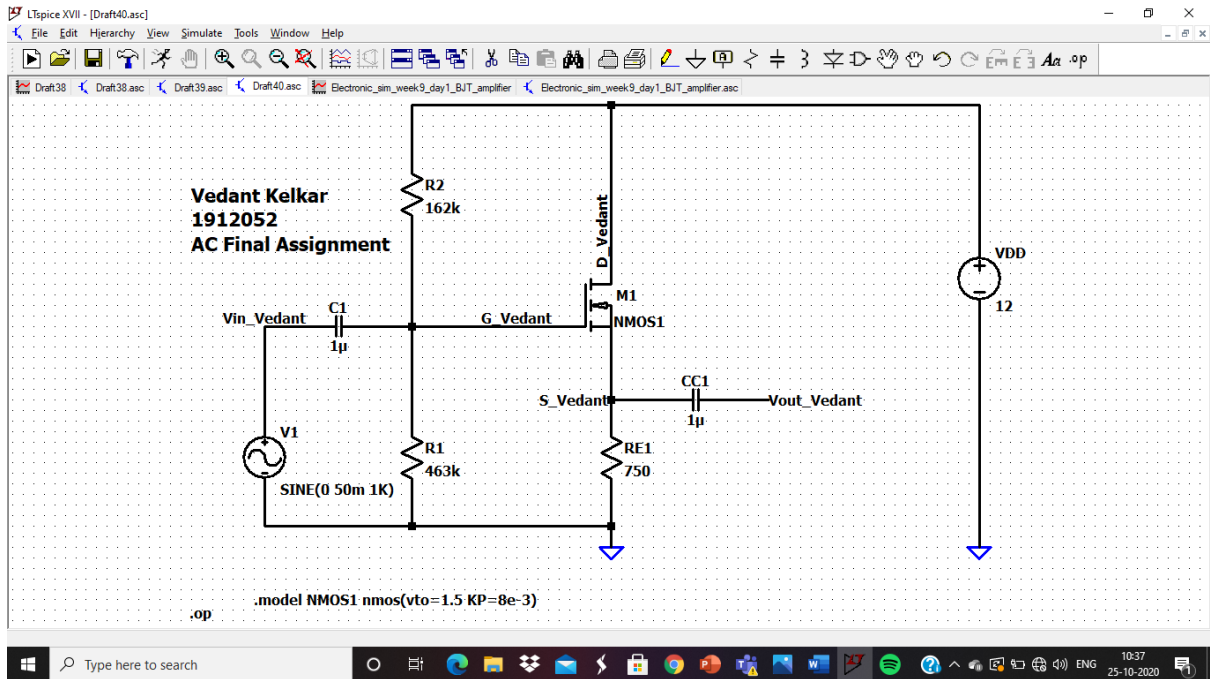


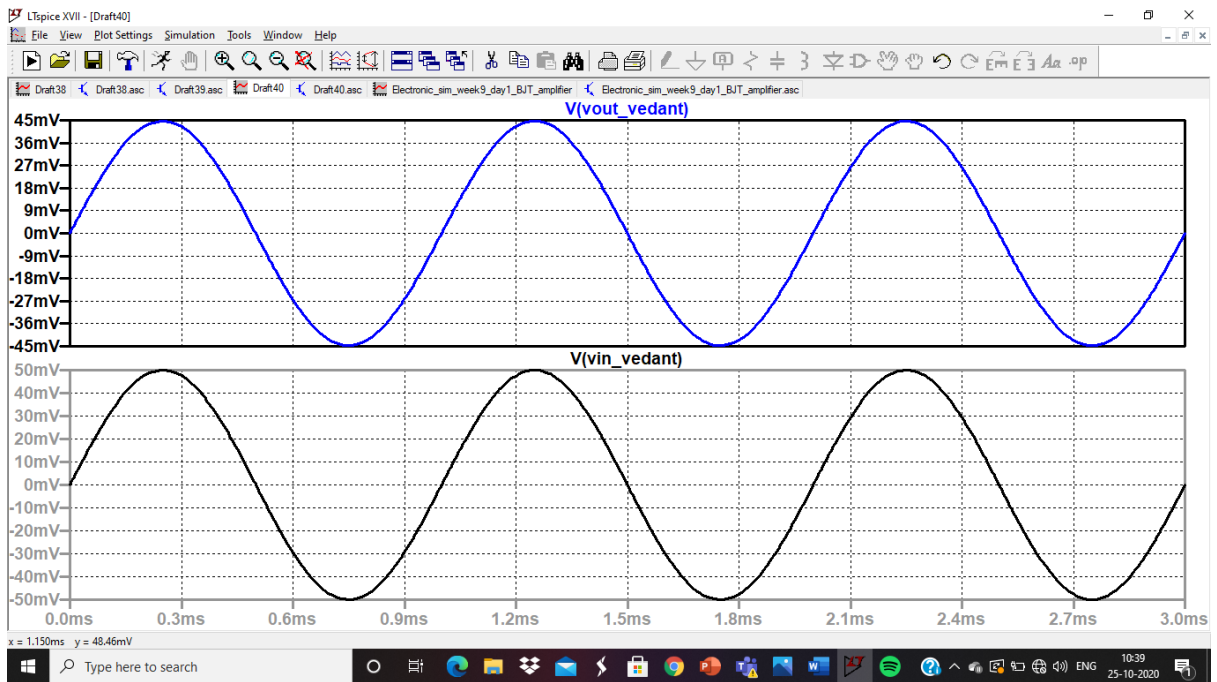
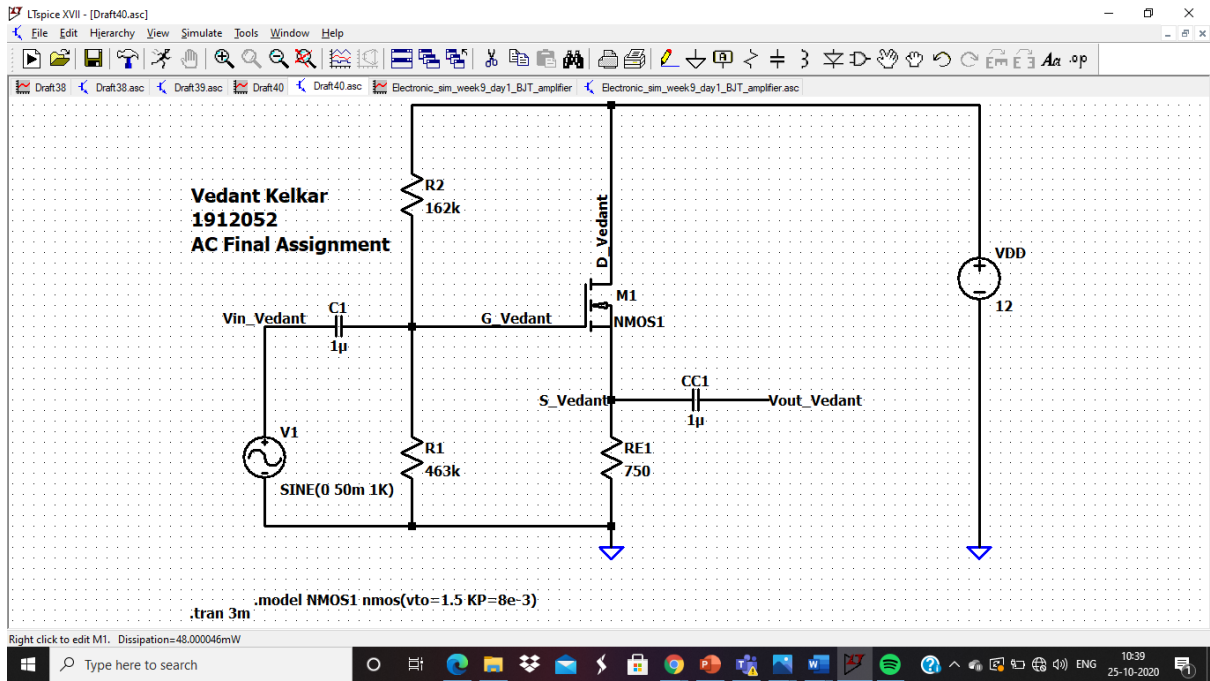




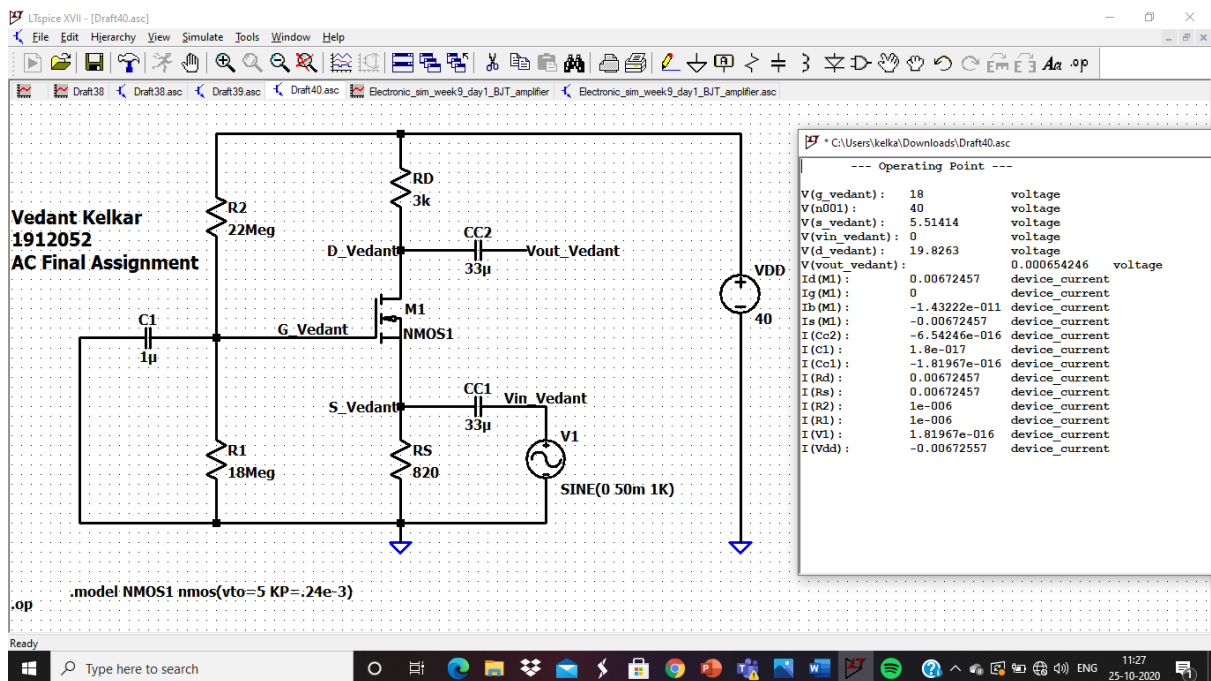
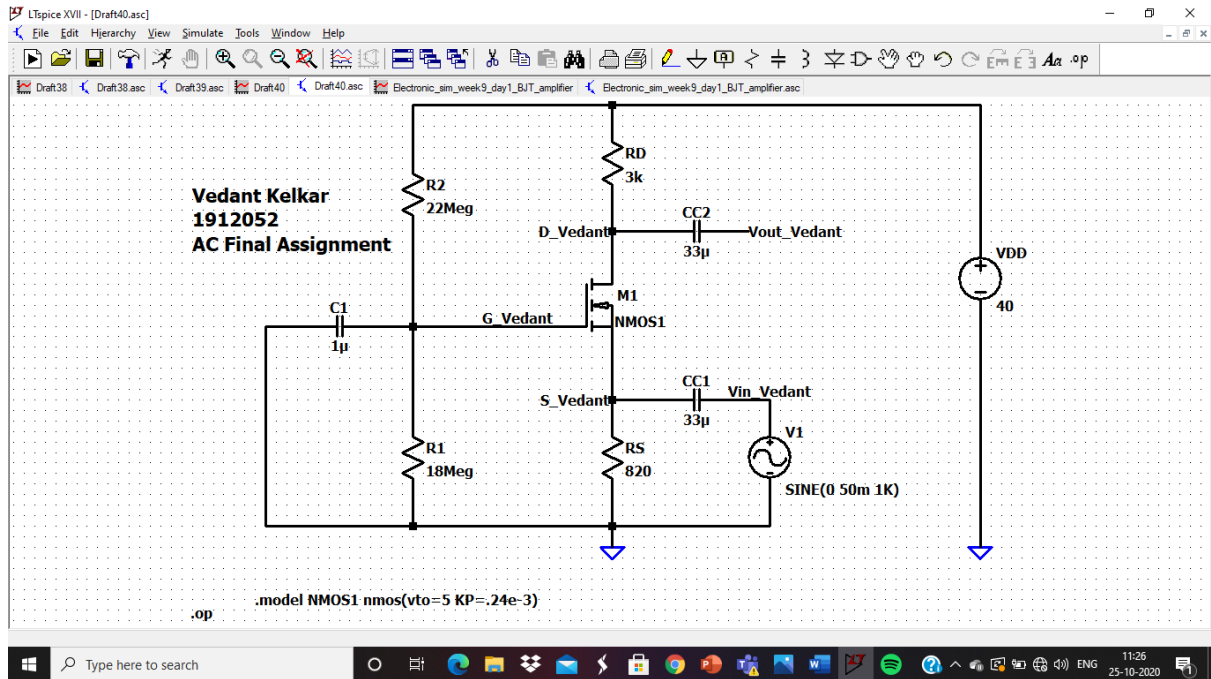
Vin	Vout	Av(Theoretical)	Av(simulated)
100mV	99.142mV	0.99179	0.99142

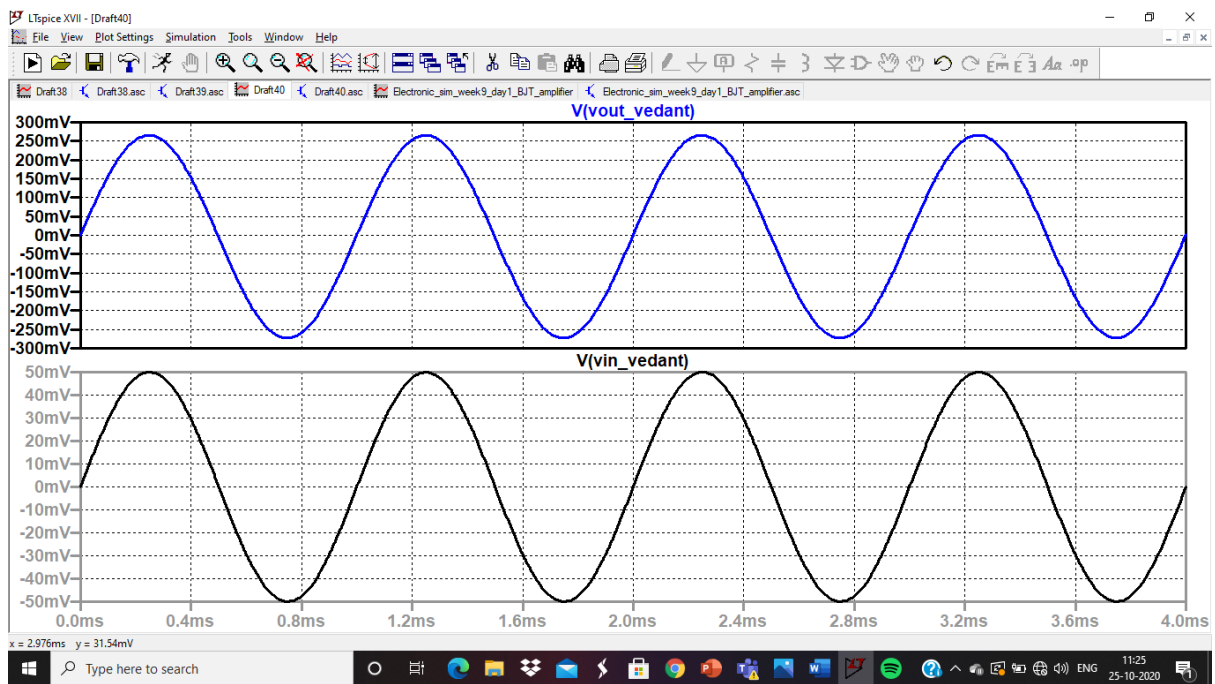
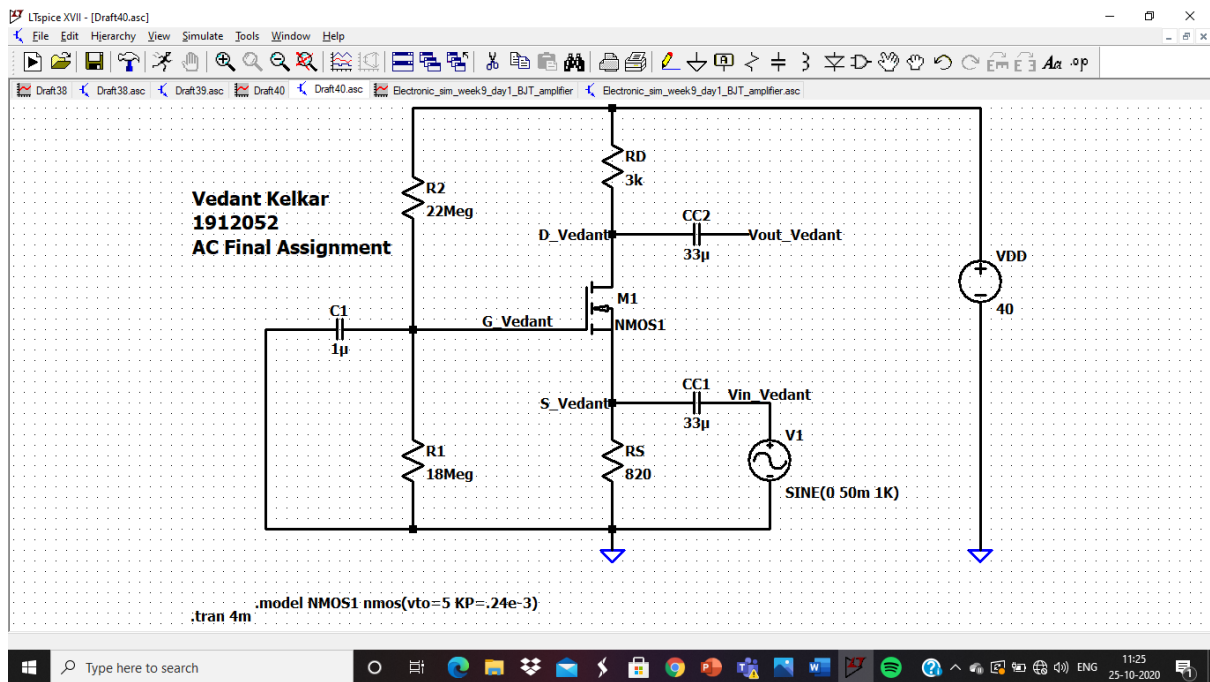
TASK 2





Vin	Vout	Av(Theoretical)	Av(simulated)
100mV	89.027mV	0.8944	0.89027

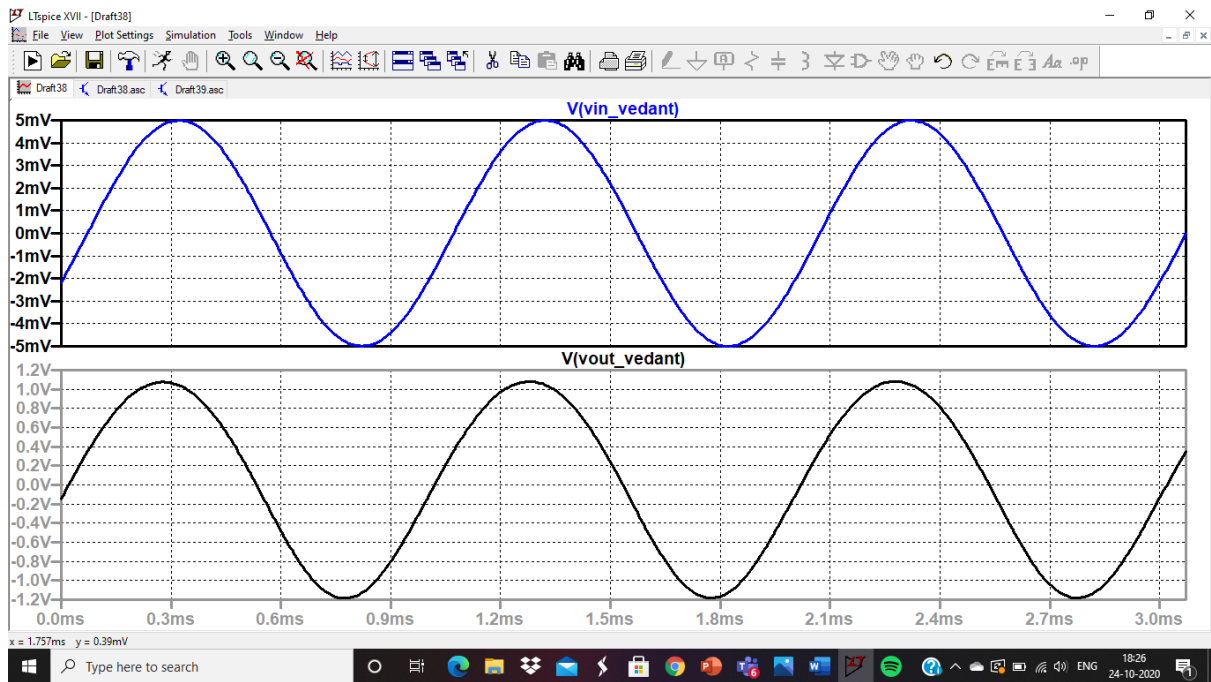
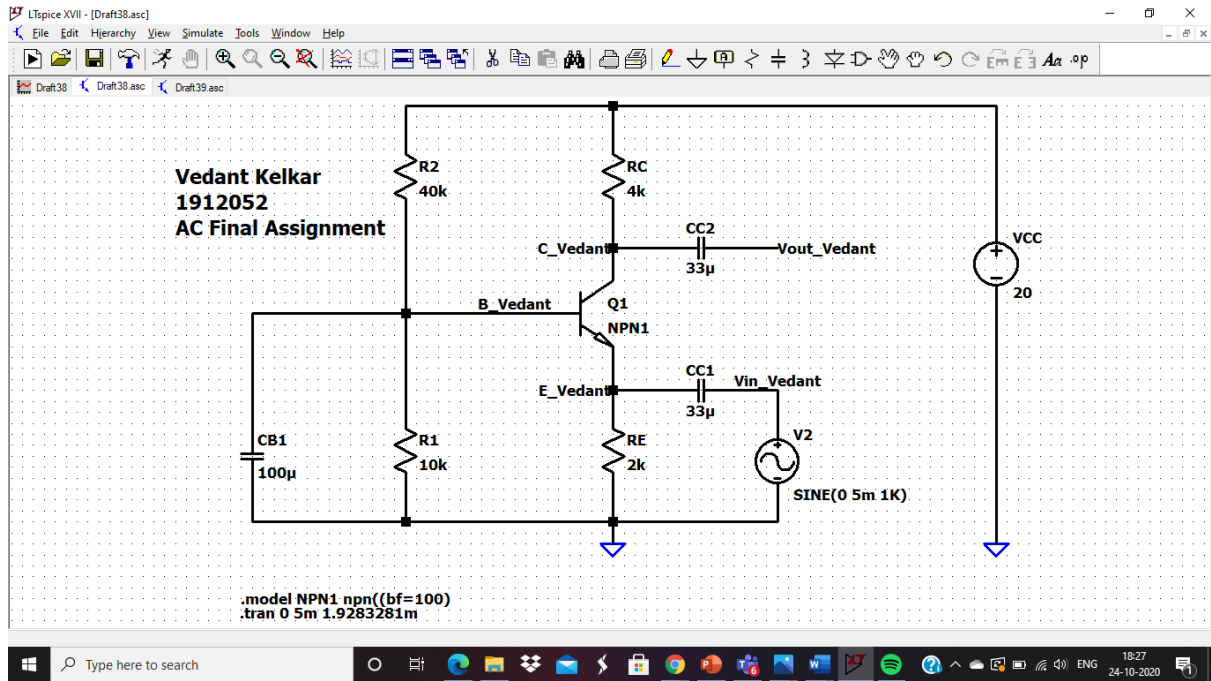




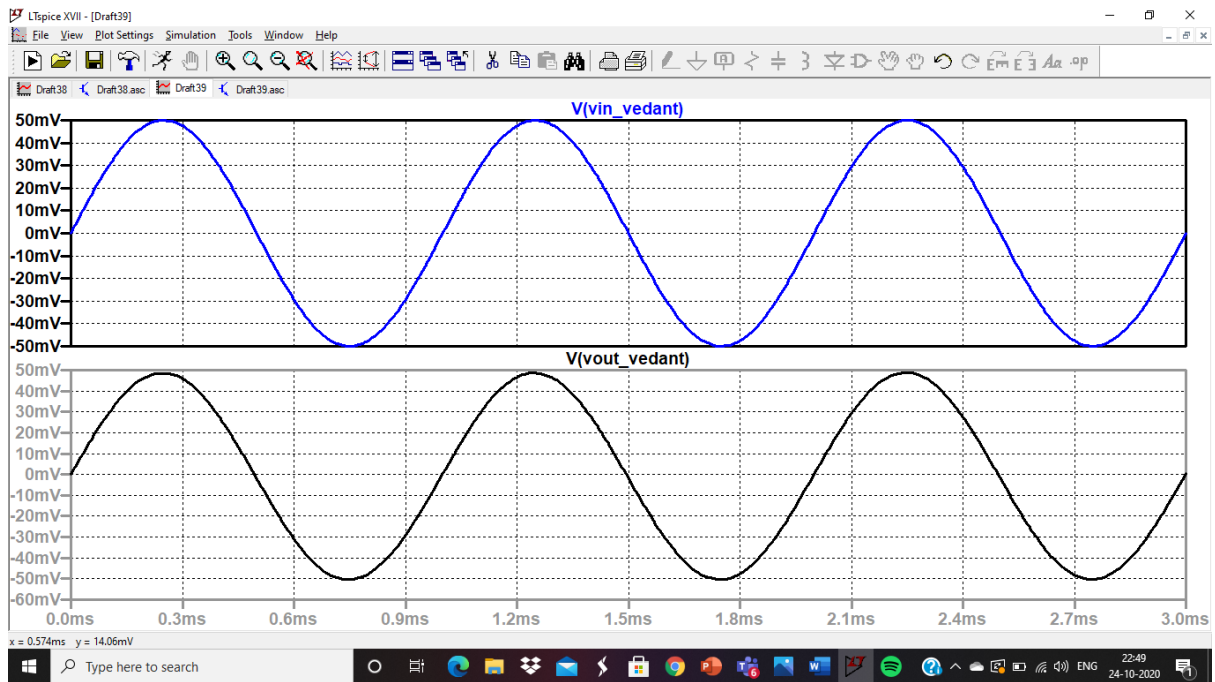
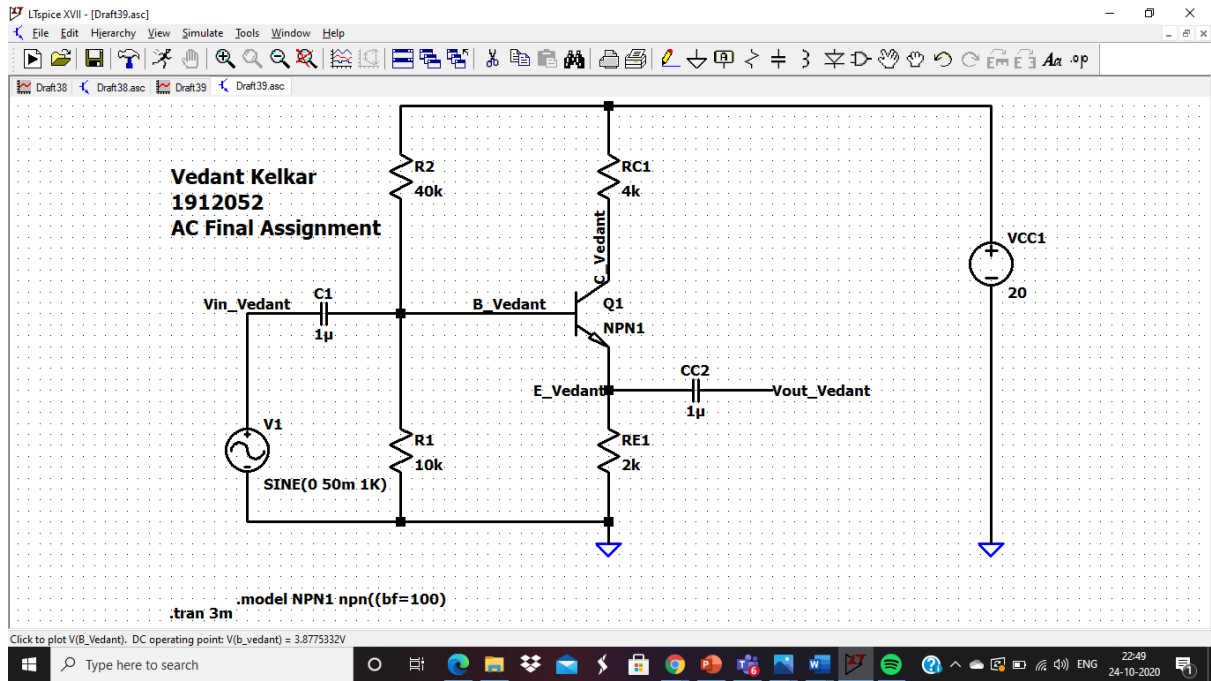
Vin	Vout	Av(Theoretical)	Av(simulated)
100mV	538.109mV	5.38109	5.38109

TASK 3

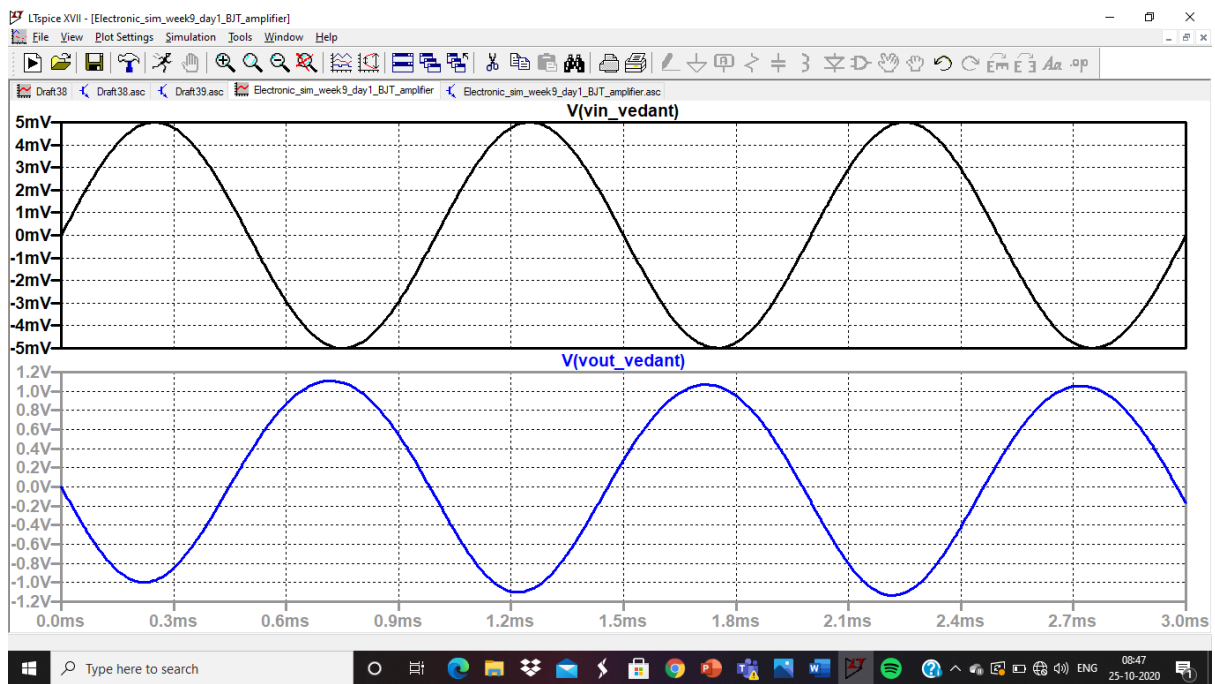
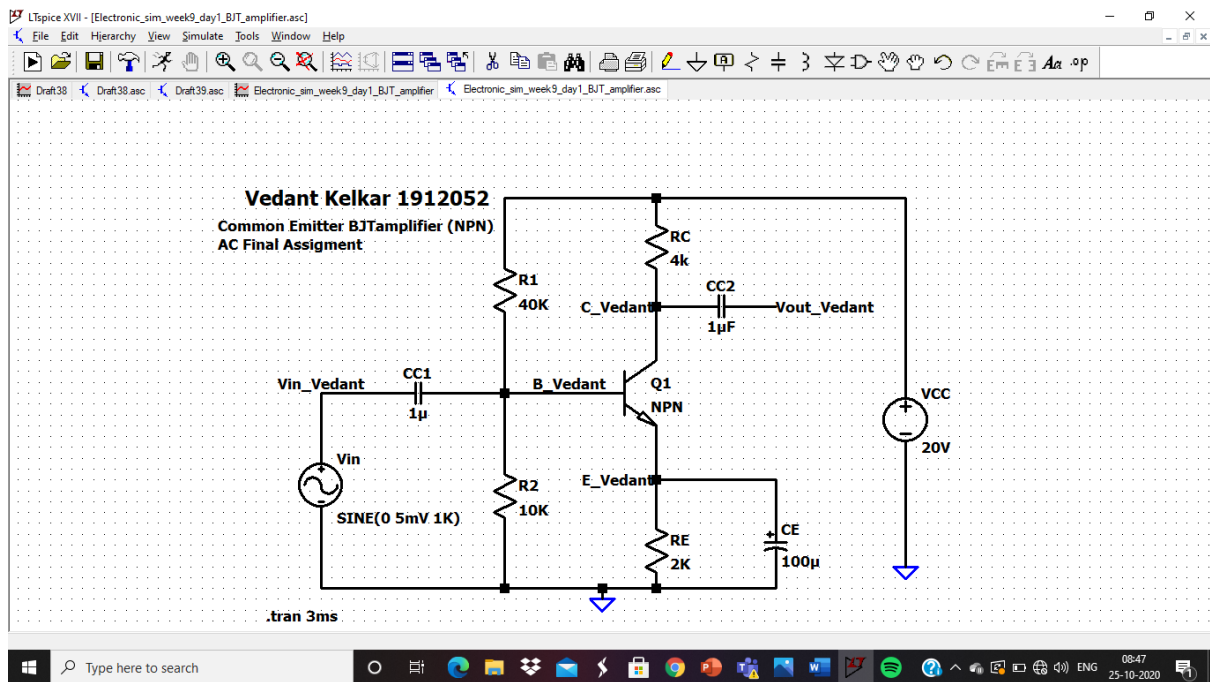
Common Base Amplifier



Common Collector Amplifier



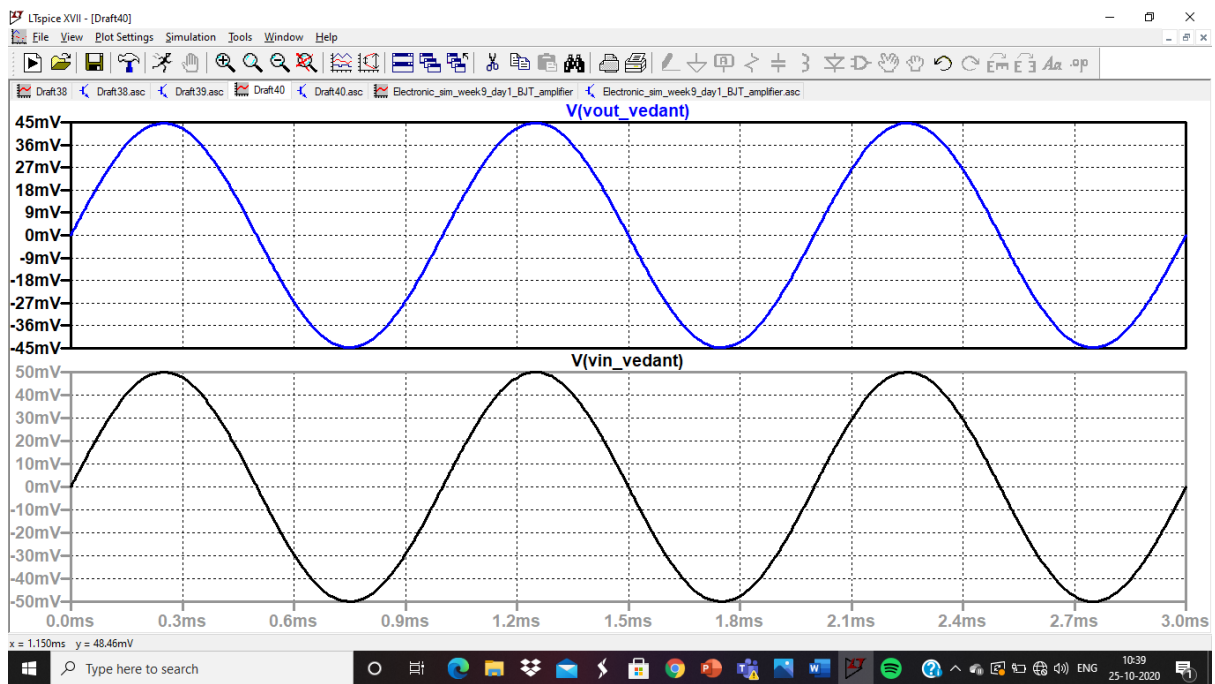
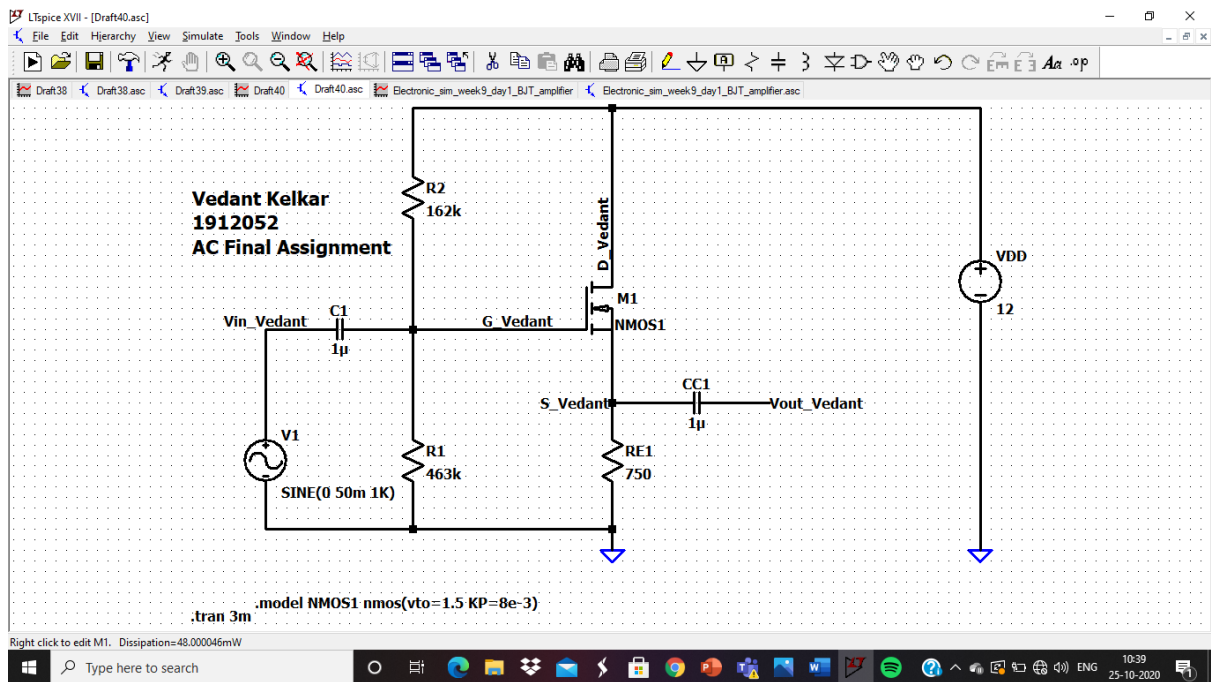
Common Emitter amplifier



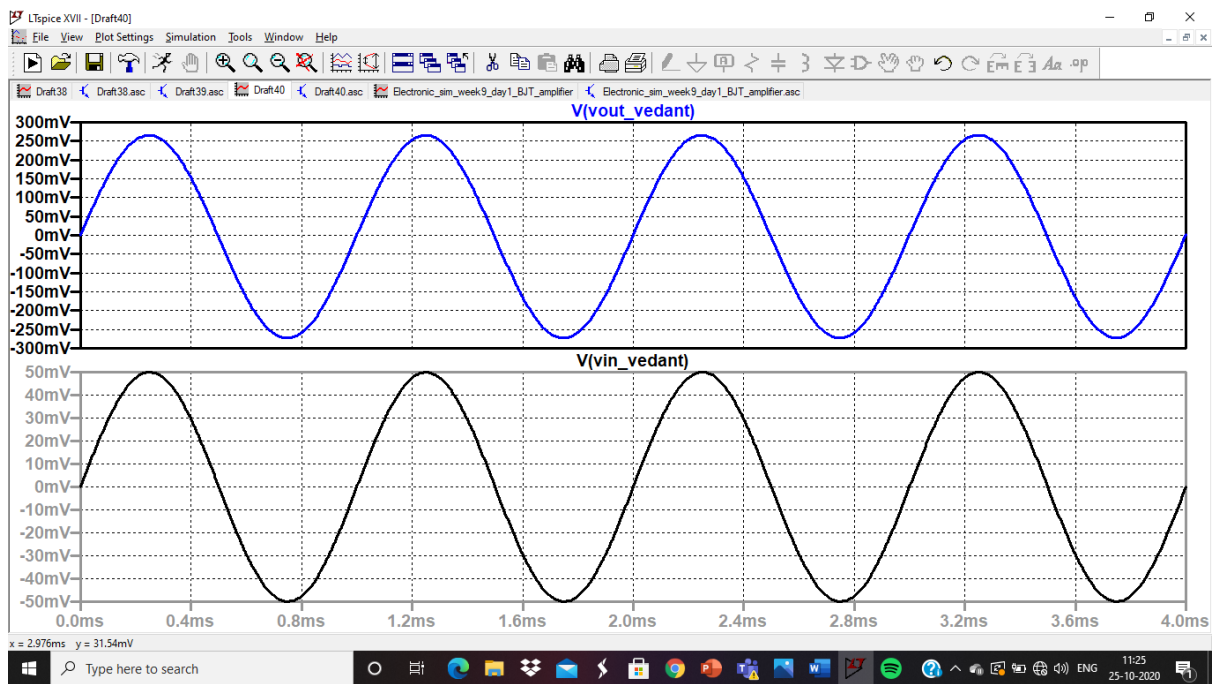
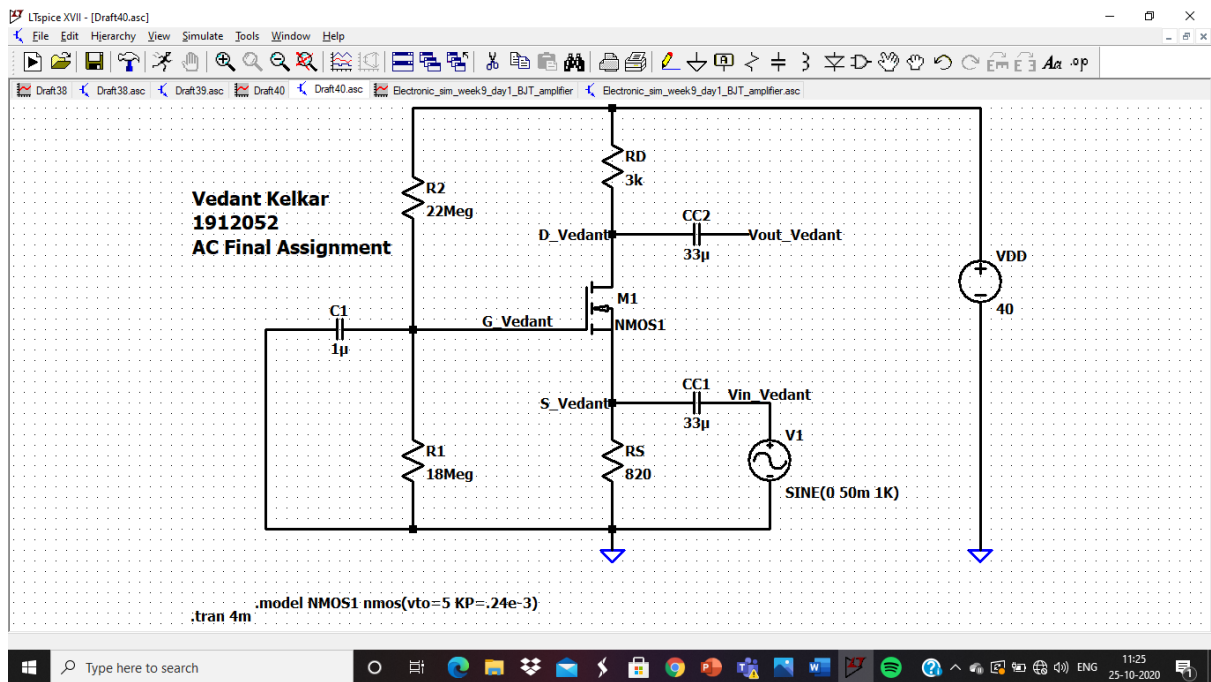
Configuration	CE	CB	CC
input connected to	Base	Collector	Base
output connected to	Collector	Emitter	Emitter
Voltage gain	-241.68	241.68	0.9981
Phase shift	180	0	0

TASK 4

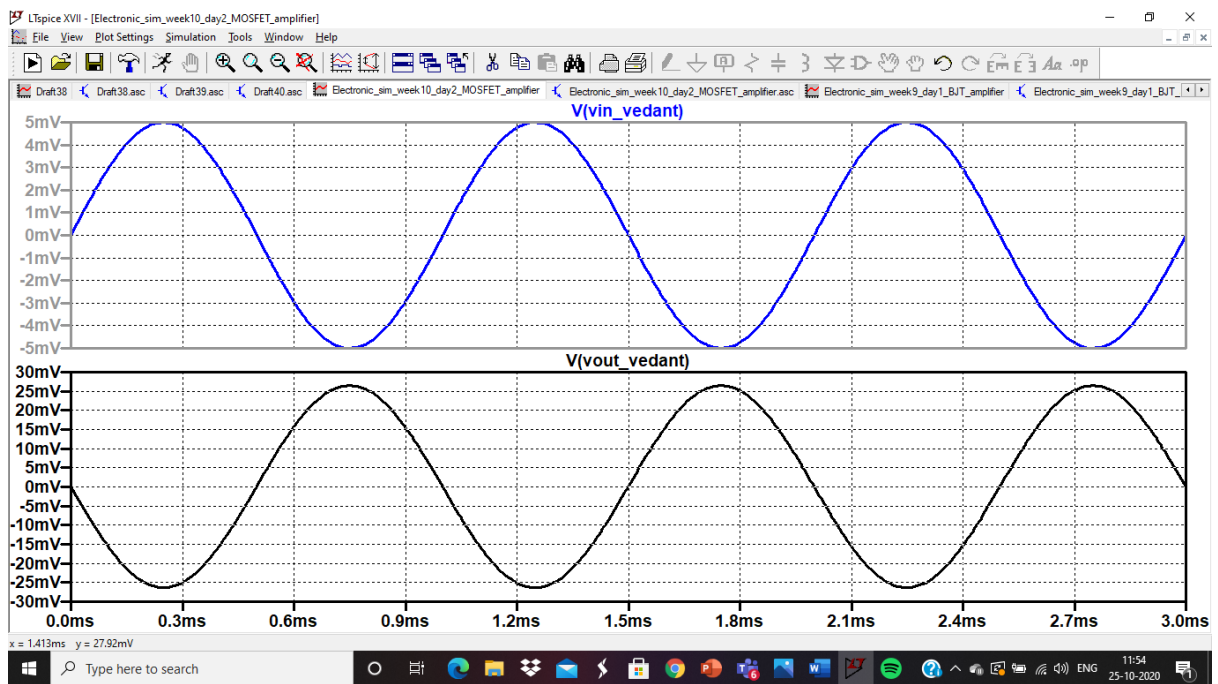
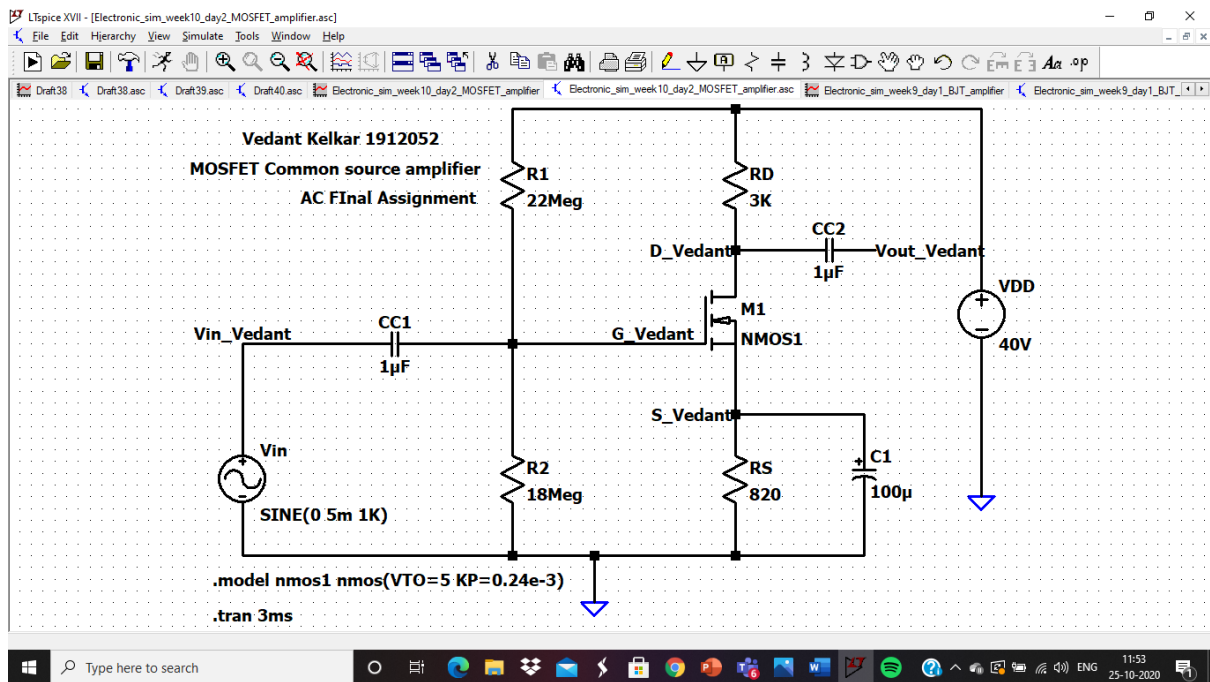
CD Amplifier



CG Amplifier



CS Amplifier



Configuration	CS	CG	CD
input connected to	Gate	Source	Gate
output connected to	Drain	Drain	Source
Voltage gain	-5.3856	5.3856	0.8972
Phase shift	180	0	0