Audit Course Session 7

AUDIT COURSE
ELECTRONIC CIRCUITS 2: SIMULATION BASED STUDY

Kindly update your name and roll no, once this document is shared with you
Time slot to complete your work is **40 MINUTES**
Date: 9/2/2021
Kindly upload your schematic & waveform images here, every 10 minutes, indicating your progress and intention to completion of WORK within time slot allotted

Time slot allotted to you all for the completion of Session 7 is 40 MINUTES

Kindly upload your work (only circuit schematic & waveform in LTSpice) in the shared google doc between this time slot only.

Follow these instruction strictly:
1, Start sharp ON TIME, by posting your name and roll no and **screenshot of your LT spice work screen (time and date MUST BE VISIBLE)**
2. Upload your work every 10 minutes, i.e LT spice work screen
3. This means you will upload LT spice work screen 4 times during this time slot.
4. Point 3 indicates your readiness and presences for completion of Session 7

You are entitled for 10 points per session only if you follow above instruction to the details
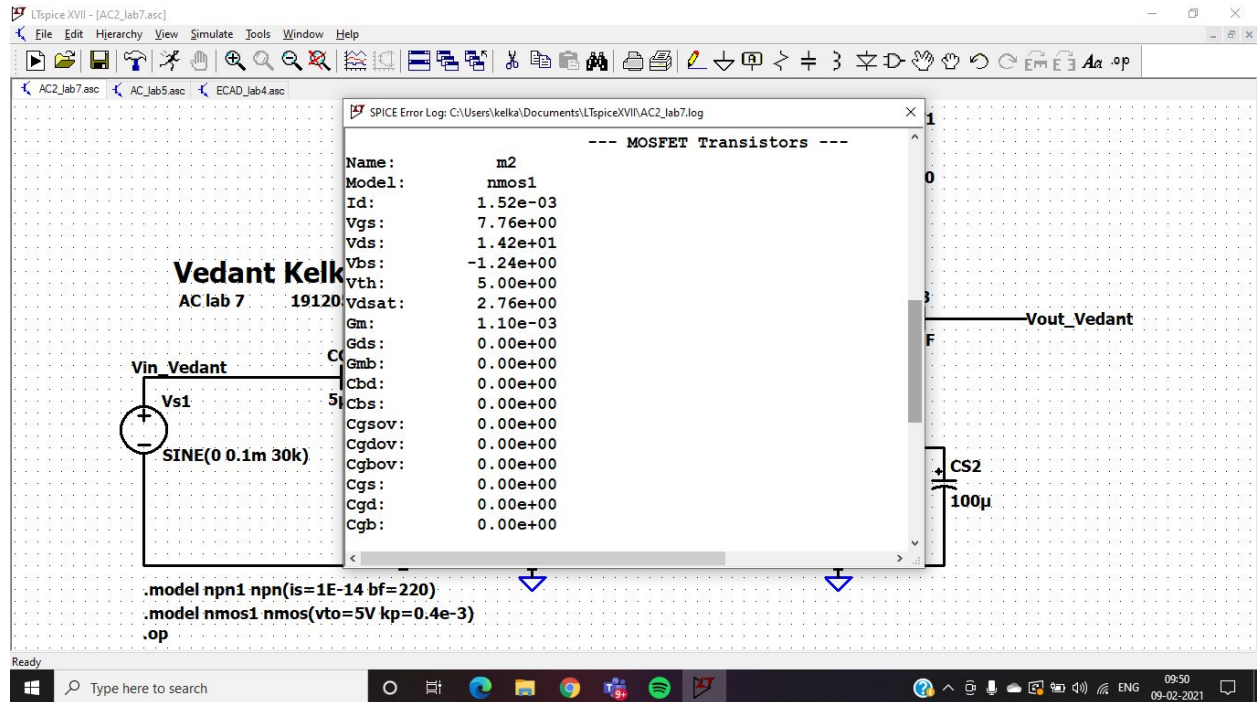
STUDENTS WORK AREA STARTS HERE
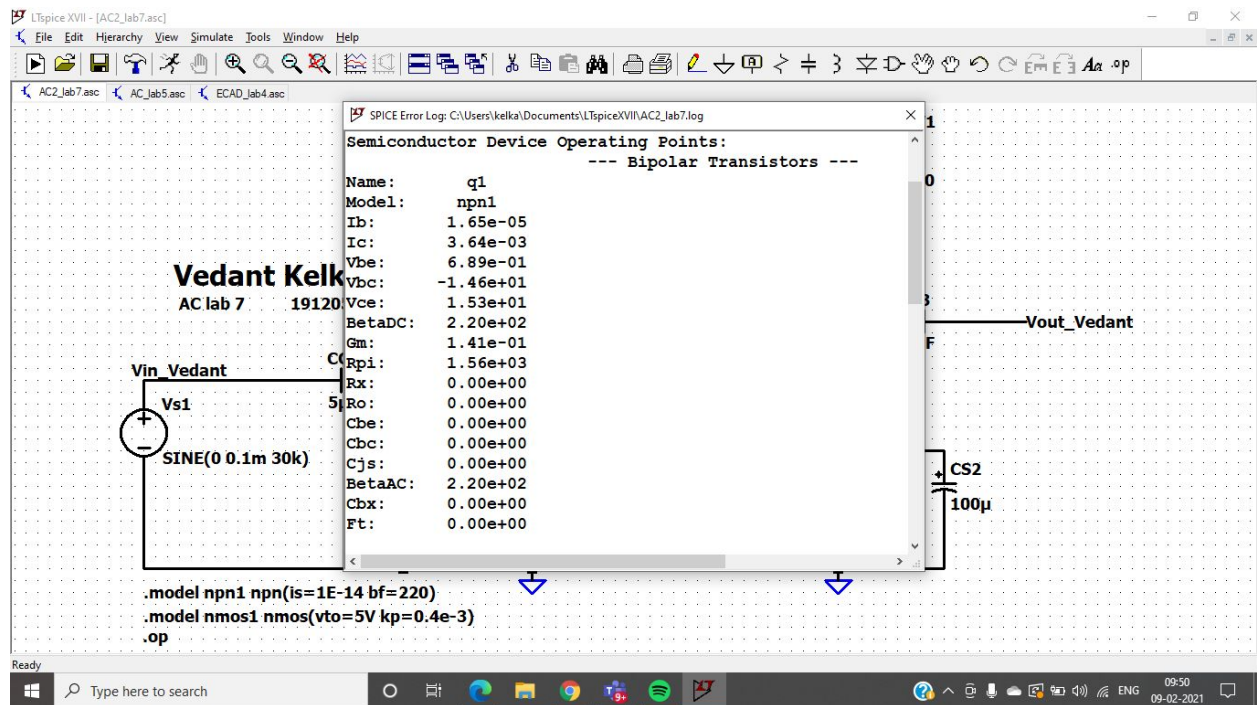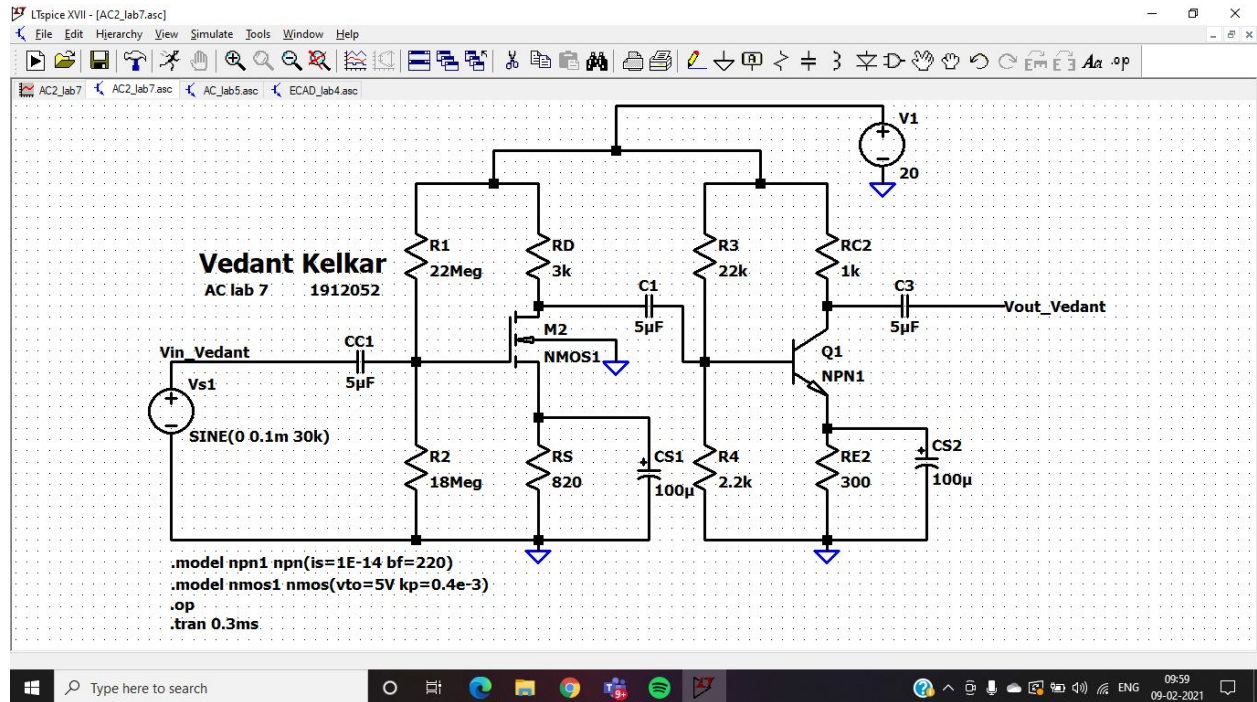
Ib: 1.65e-05

Ic: 3.64e-03

Vbe: 6.89e-01

Vbc: -1.46e+01

Vce: 1.53e+01

BetaDC: 2.20e+02

Gm: 1.41e-01

Rpi: 1.56e+03
Rx: 0.00e+00
Ro: 0.00e+00
Cbe: 0.00e+00
Cbc: 0.00e+00
Cjs: 0.00e+00
BetaAC: 2.20e+02
Cbx: 0.00e+00
Ft: 0.00e+00

Ib	1.65e-05
Ic	3.64e-03
Vbe	6.89e-01
Vbc	-1.46e+01
Vce	1.53e+01
BetaDC	2.20e+02
Gm	1.41e-01
Rpi	1.56e+03
BetaAC	2.20e+02

Id: 1.52e-03

Vgs: 7.76e+00

Vds: 1.42e+01

Vbs: -1.24e+00

Vth: 5.00e+00

Vdsat: 2.76e+00

Gm: 1.10e-03

Gds: 0.00e+00

Gmb: 0.00e+00

Cbd: 0.00e+00

Cbs: 0.00e+00

Cgsov: 0.00e+00

Cgdov: 0.00e+00

Cgbov: 0.00e+00

Cgs: 0.00e+00

Cgd: 0.00e+00

Cgb: 0.00e+00

Id	1.52e-03
Vgs	7.76e+00
Vds	1.42e+01

Vth	5.00e+00
Vdsat	2.76e+00
Gm	1.10e-03
Vbs	-1.24e+00
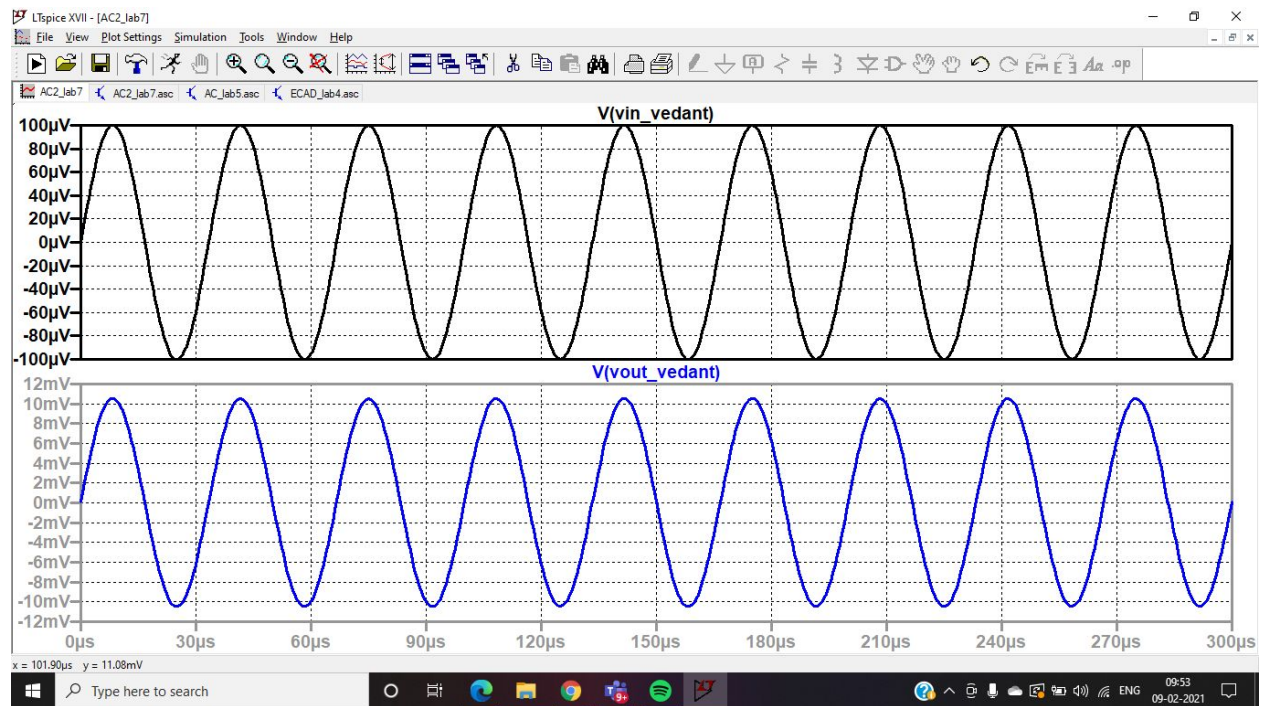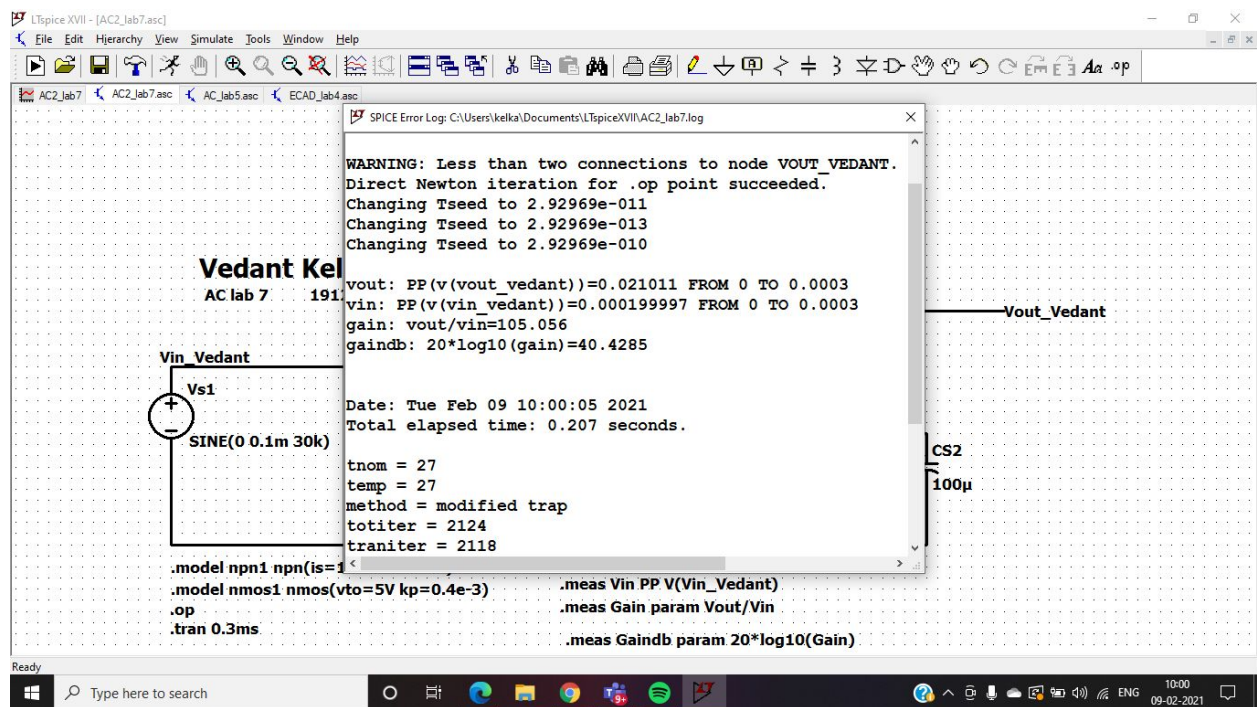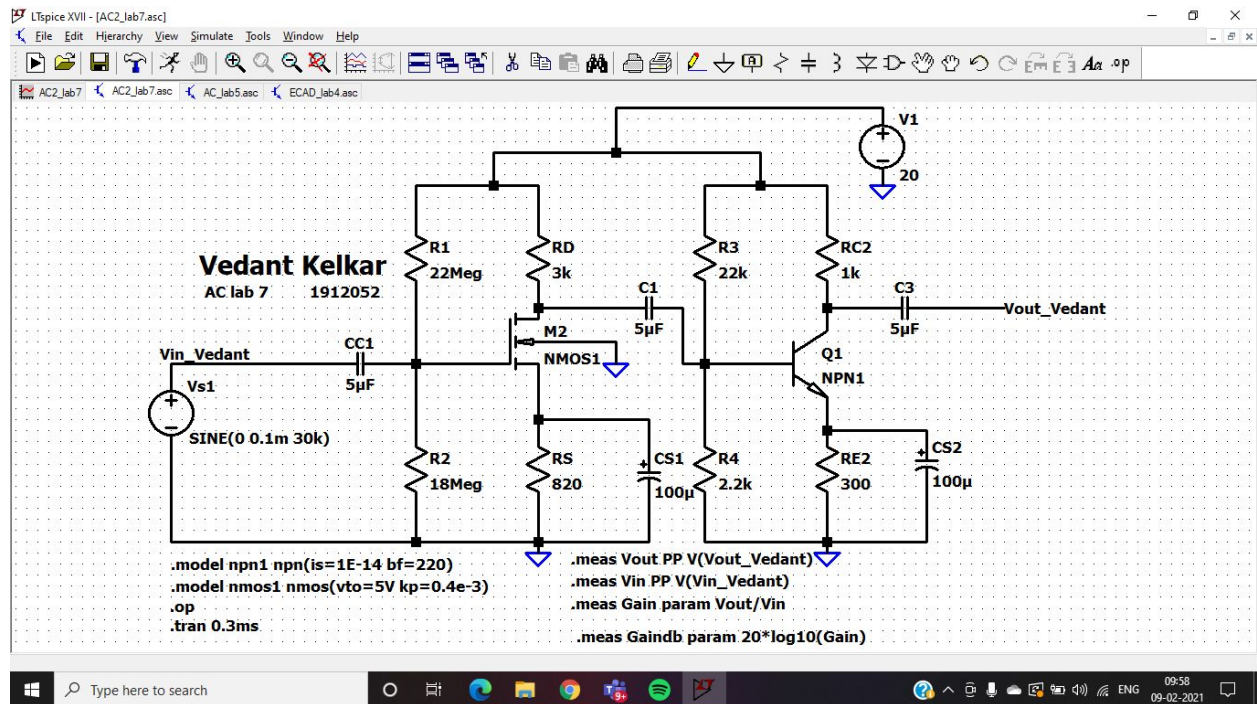
vout: PP(v(vout_vedant))=0.021011 FROM 0 TO 0.0003
vin: PP(v(vin_vedant))=0.000199997 FROM 0 TO 0.0003
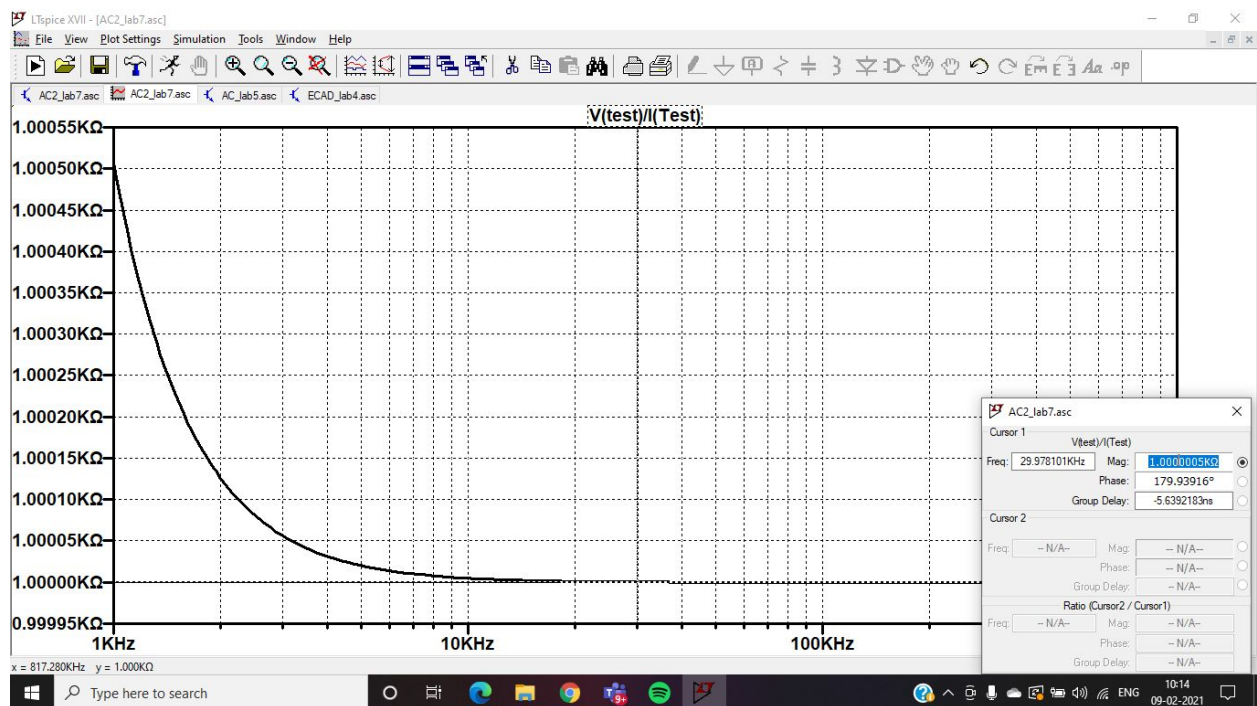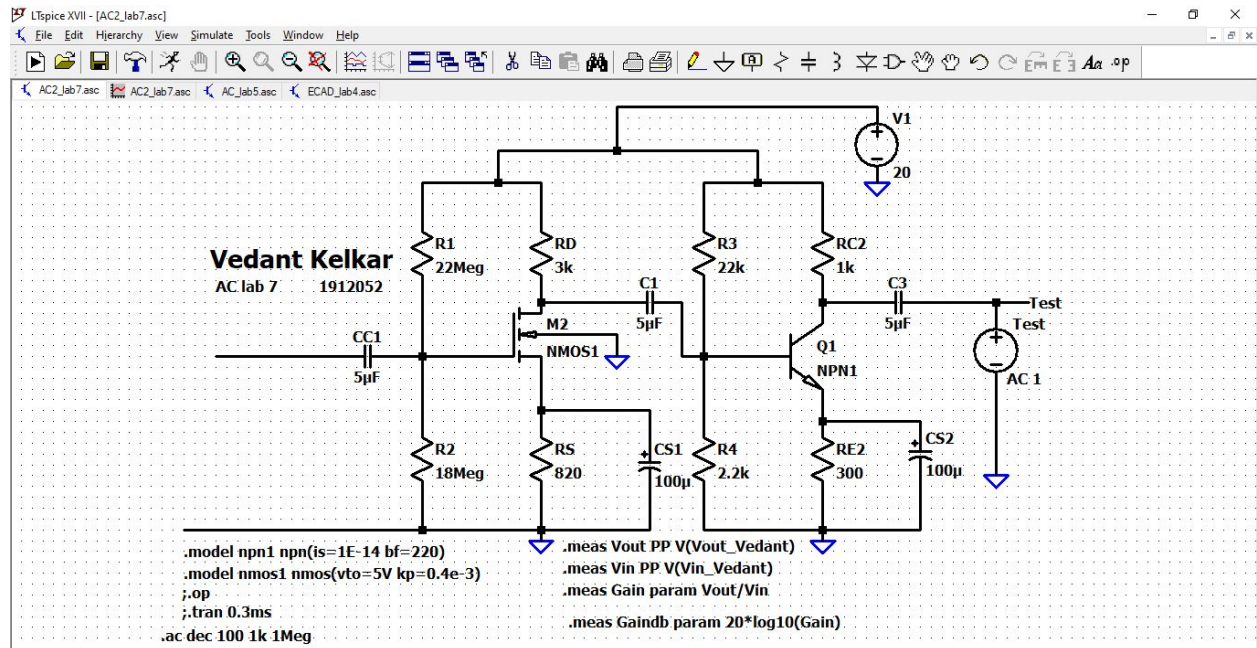gain: vout/vin=105.056
gaindb: 20*log10(gain)=40.4285

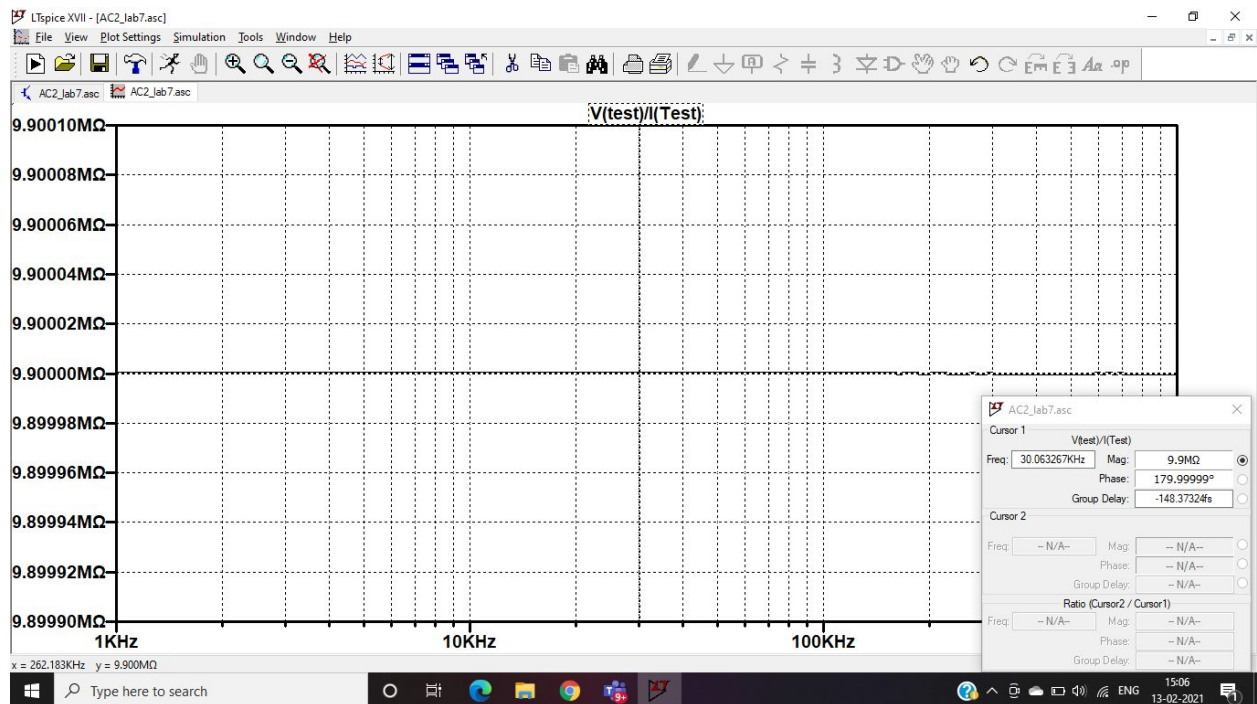| Gain	105.056

Zin
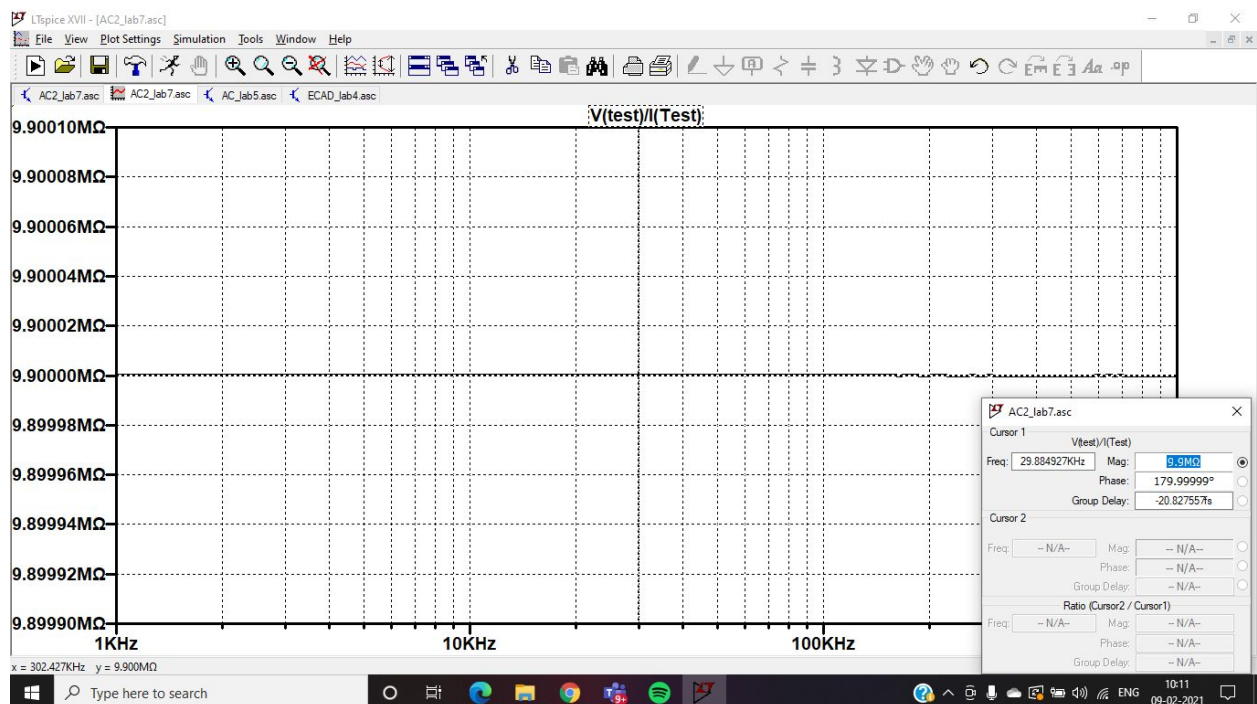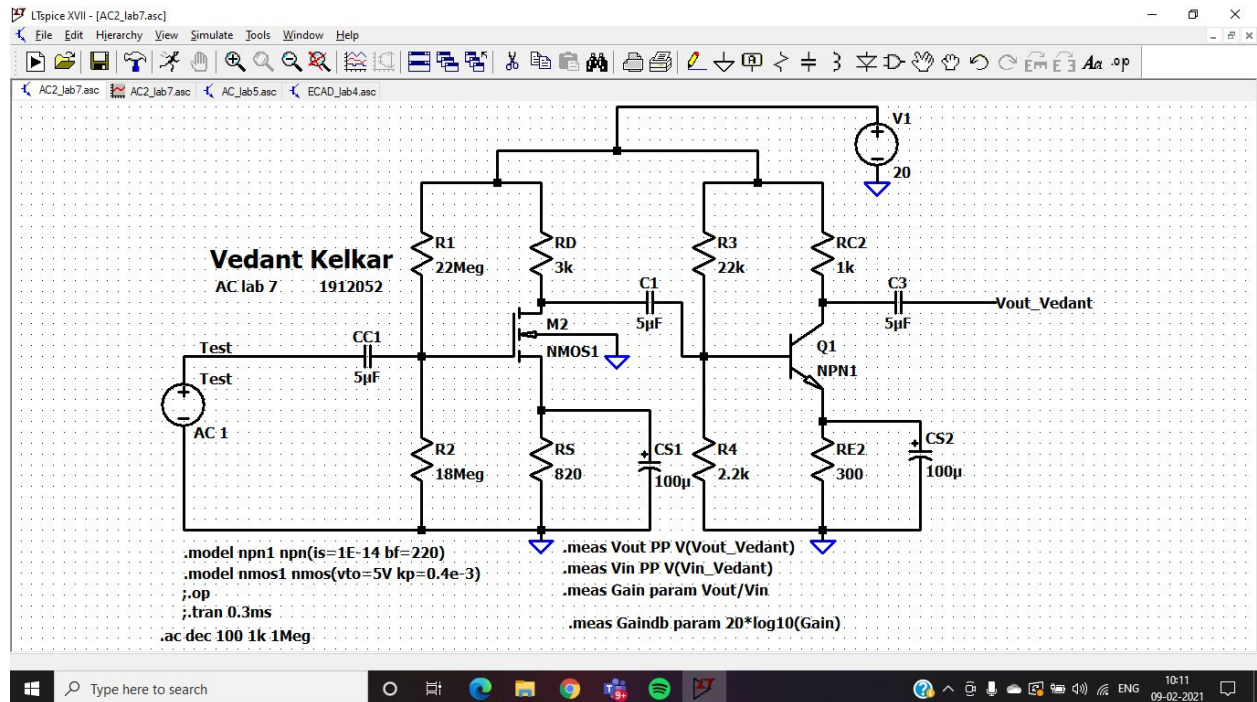
9.9MOhm

Zout

1.0000005KOhm

Zin	Zout

9.9MOhm	1.0000005KOhm

EX1   RD=1.8k

Zin
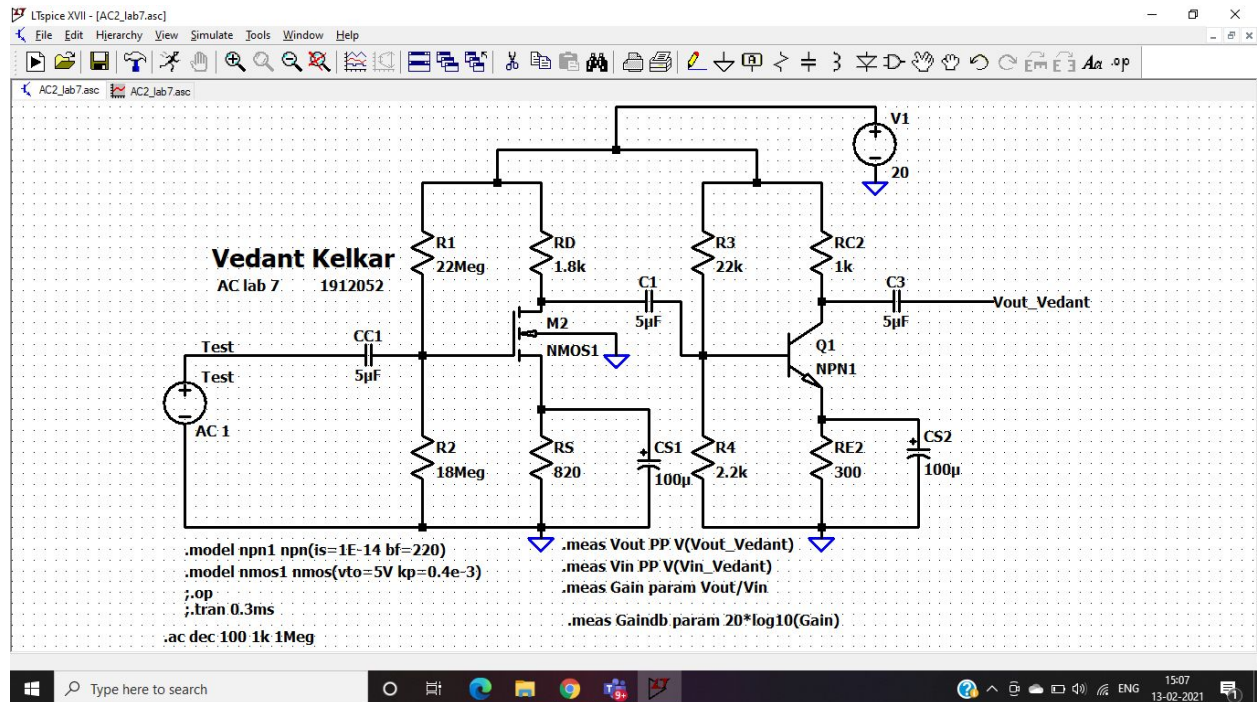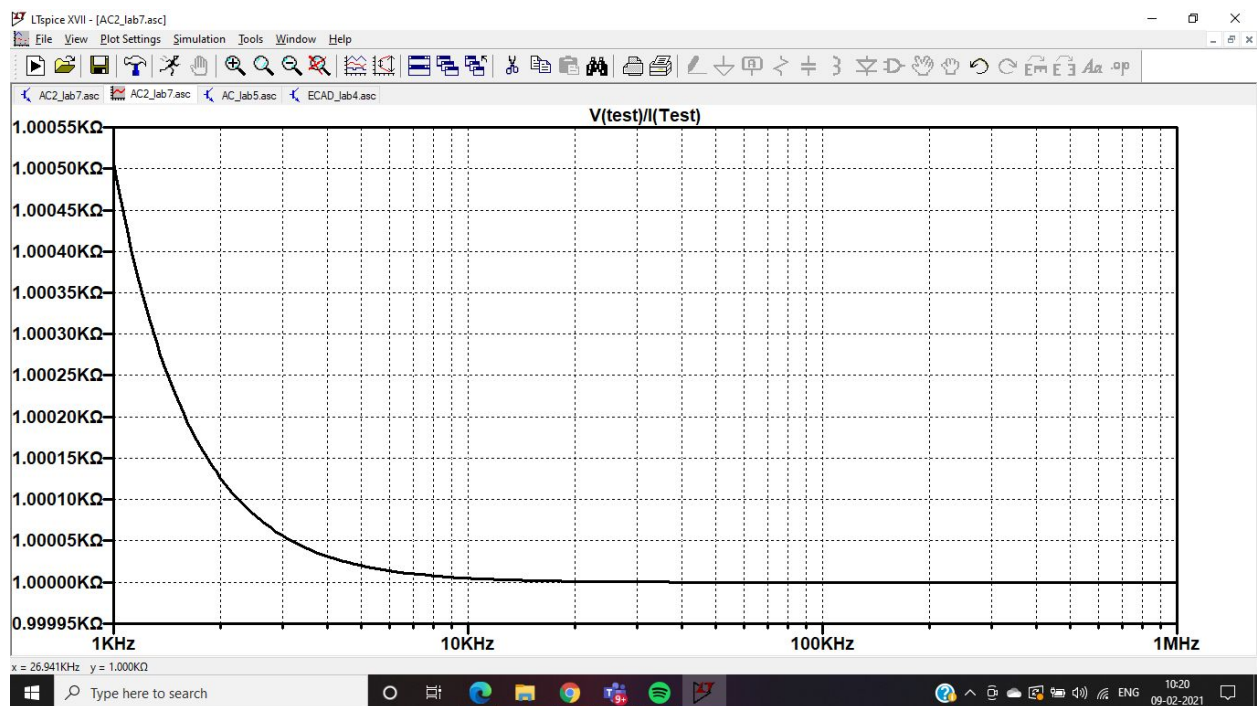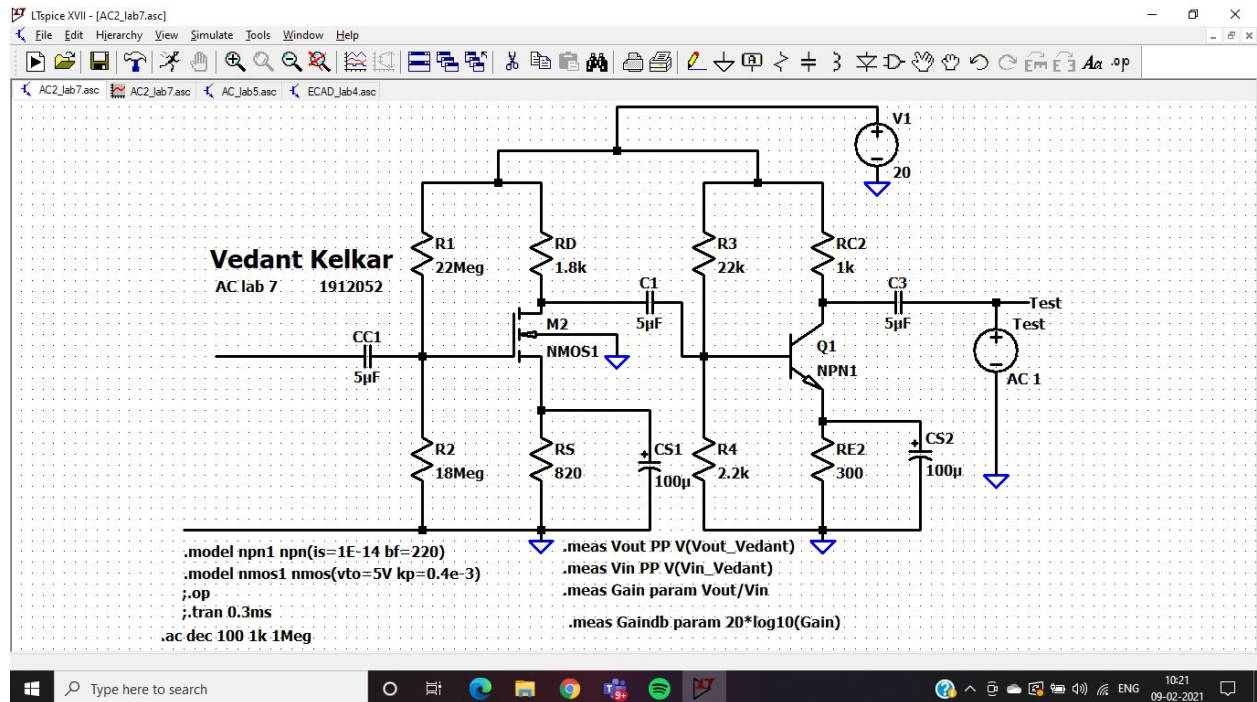
9.9MOhm

Zout

1.0000005KOhm

Zin	Zout
9.9MOhm	1.0000005KOhm

EX2 RC=1.8k

Zin

9.9MOhm

Zout

1.8KOhm

Zin	Zout

| 9.9MOhm | 1.8KOhm |
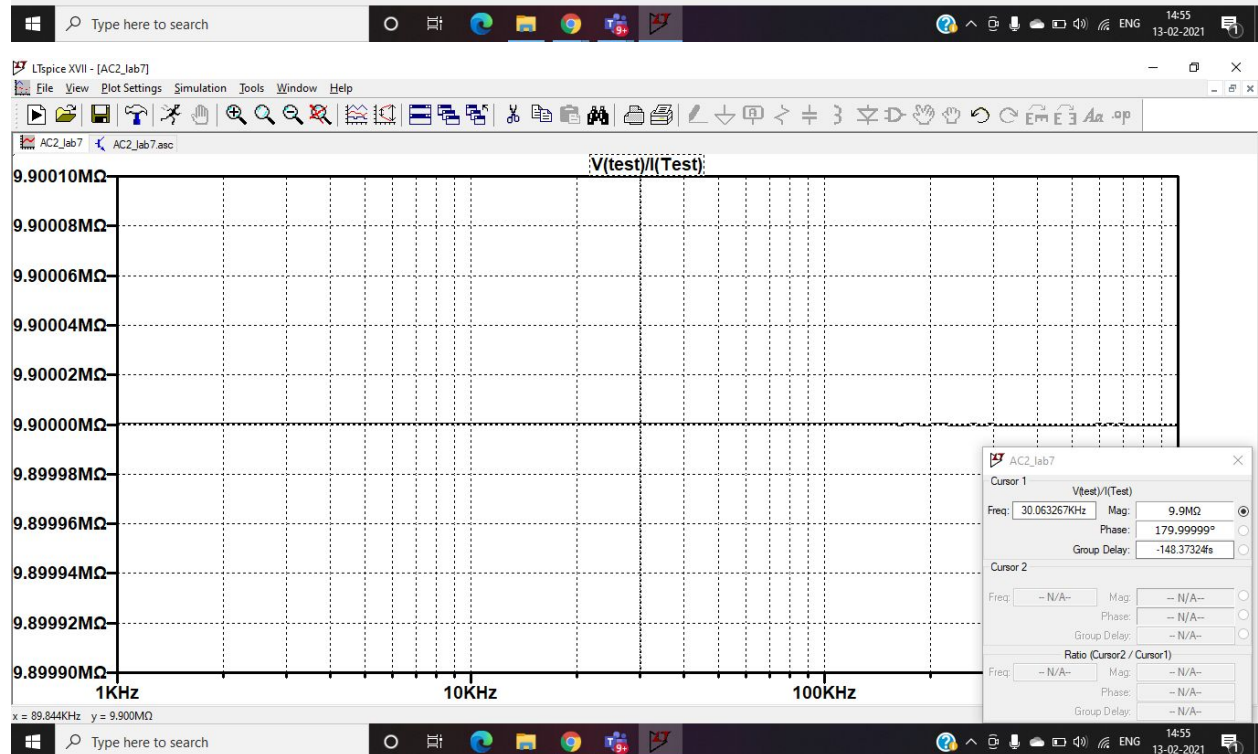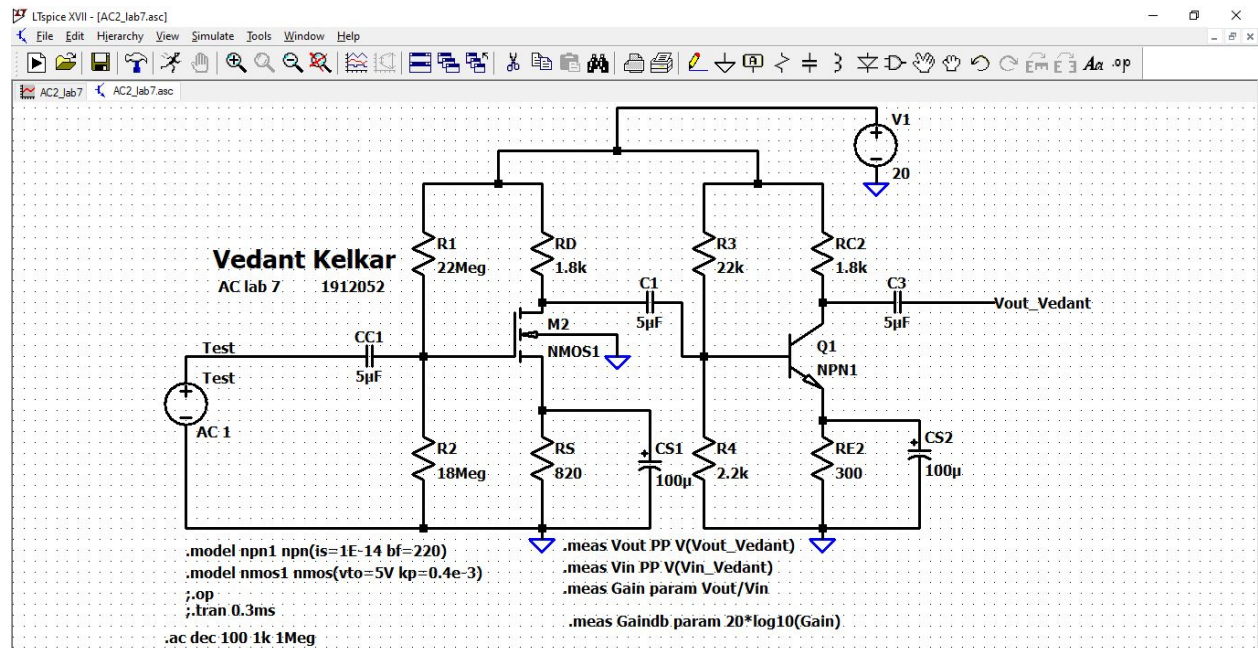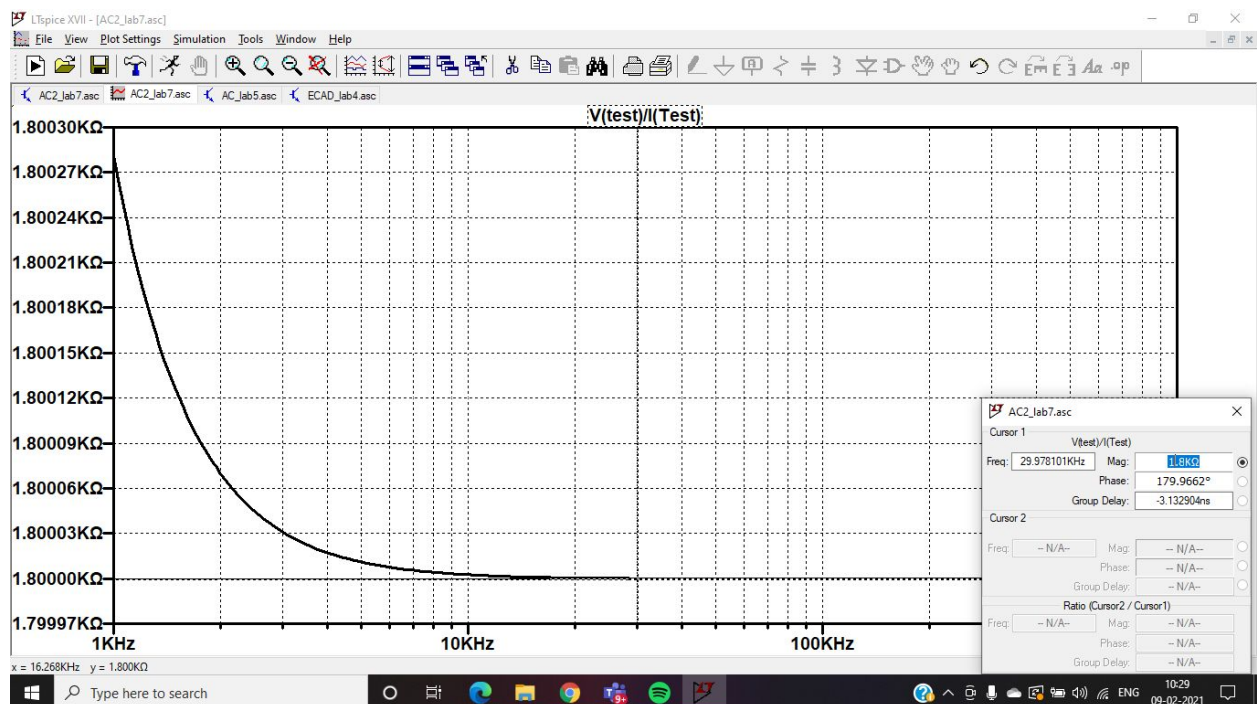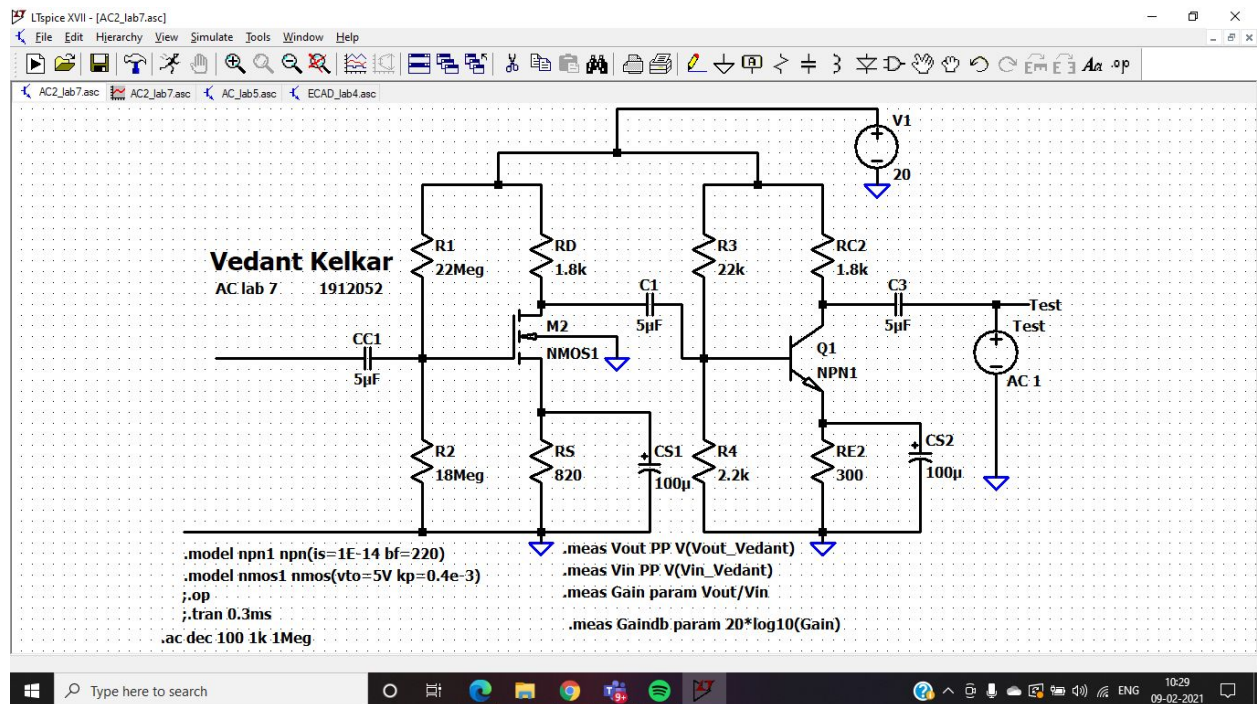
Suggestions: add inferences from exercise

AC LAB 7 is approved with suggestions: Inderjit SIngh Dhanjal