## REQUIREMENTS NOT MET

- Requirement 1: The requirement was not met because of this reason.
- Requirement 2: The requirement was not met because of this reason.
- Requirement 3: The requirement was not met because of this reason.

#### PROBLEMS ENCOUNTERED

- Problem 1: The problem was encountered because of this reason.
- **Problem 2:** The problem was encountered because of this reason.
- **Problem 3:** The problem was encountered because of this reason.

### INTRODUCTION

Now we start our introduction to our write up For your write up, write a brief introduction to what you are doing in the in lab. two to four sentences. Omit this section for the prelab.

### DISCUSSION

# 9.5 Pre-Lab Requirements:

## 9.5.1 LTSpice Simulations:

- 1. Review AC Analysis in LTSpice
- 2. Build a simple lowpass filter, Figure 9.2a, but set R = 10 k Ohm and  $C = 0.001 \ \mu F$ . Set the voltage source to an AC amplitude of 1 and run an AC analysis with the following settings: Decade, 100, 1, 1Meg. Save an image of the circuit, a plot of the output, and table the 3 dB frequency for submission.

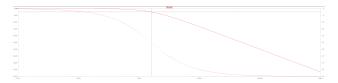


Figure 1: Plot of Low Pass Filter

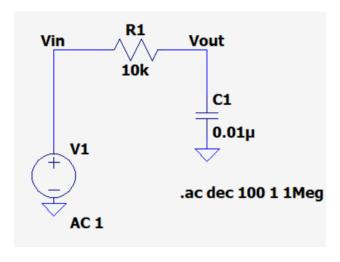


Figure 2: Circuit of Low Pass Filter

LOW-PASS	1.6 kHz	$45 \deg$
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3. High Pass Filter



Figure 3: Plot of High Pass Filter

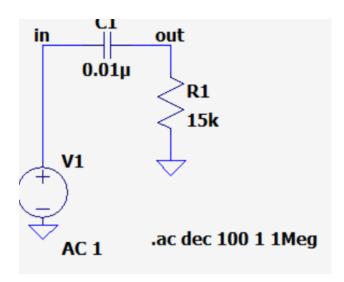


Figure 4: Circuit of High Pass Filter

HIGH-PASS | 1.063 kHz | 45 deg

4. Active Low Pass Filter with  $R=1k\Omega$  and  $C=0.1\mu F$ 



Figure 5: Plot of Active Low Pass Filter

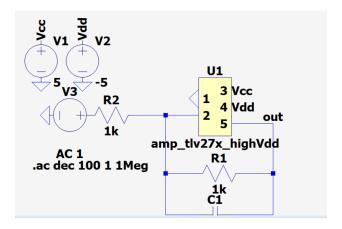


Figure 6: Circuit of Active Low Pass Filter

ACTIVE LOW-PASS | 1.59 kHz | 45 deg

## CONCLUSION

This is where I start to answer the questions in the lab. We only need to do this for the write up.