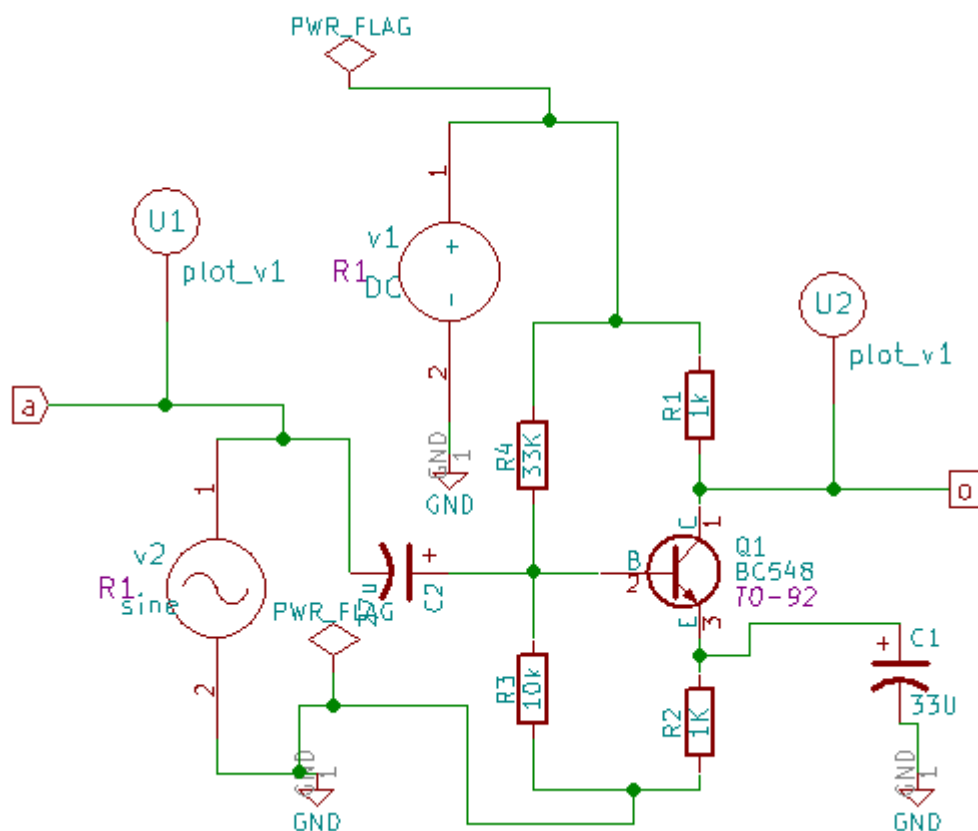# CLASS A AMPLIFIER

KARTHIKA K

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INTRODUCTION:

Class A power amplifier uses a single-ended transistor for its output stage with the resistive load connected directly to the Collector terminal. When the transistor switches "ON" it sinks the output current through the Collector resulting in an inevitable voltage drop across the Emitter resistance thereby limiting the negative output capability. A Class A amplifier stage passes the same load current even when no input signal is applied so large heatsinks are needed for the output transistors.
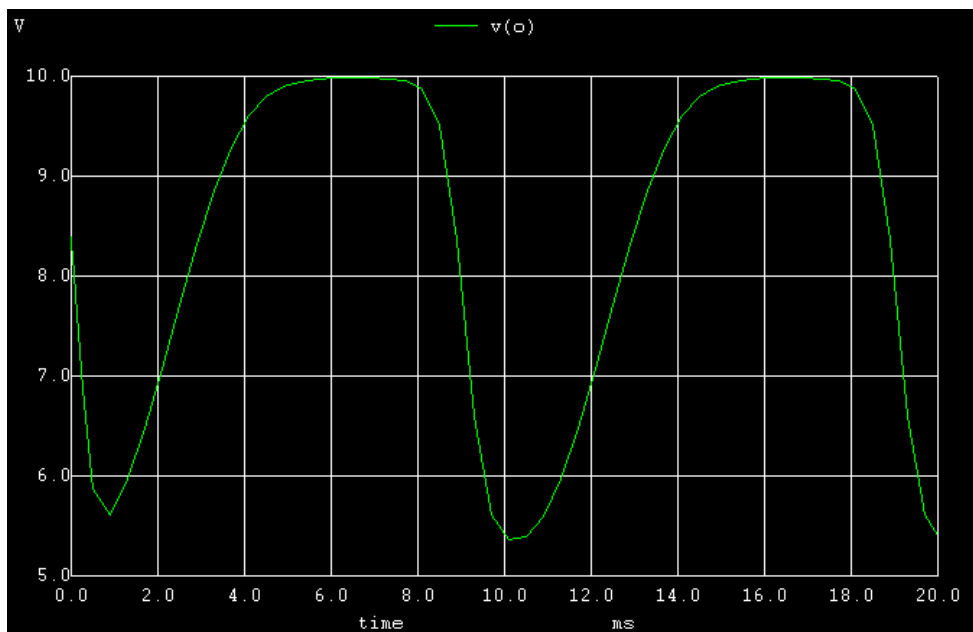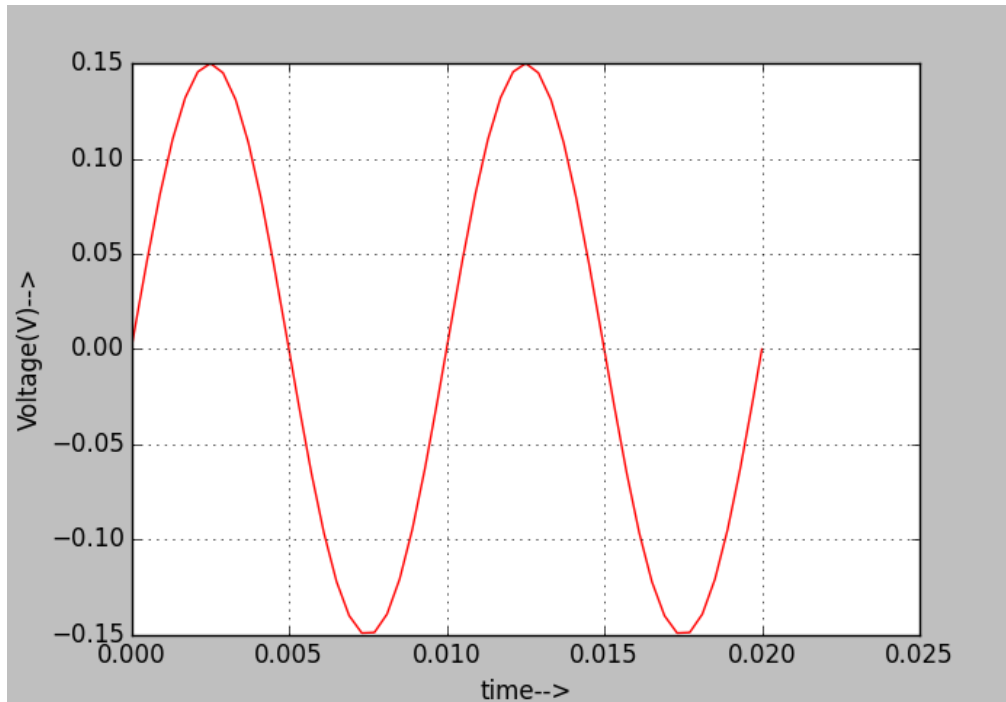
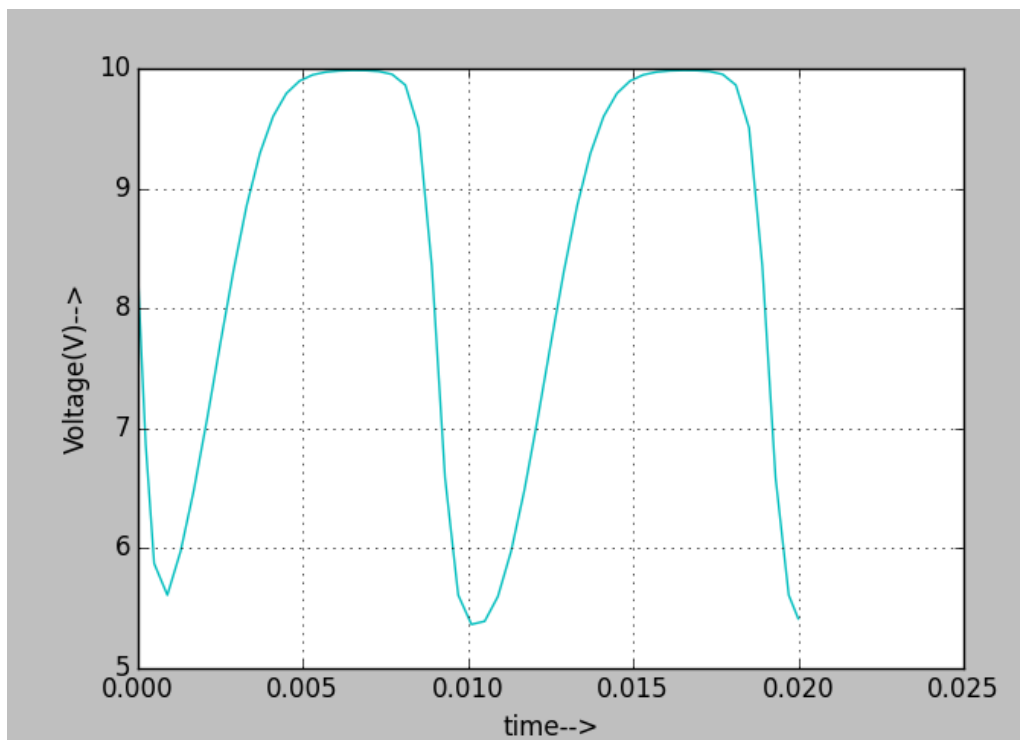## SCHEMATIC DIAGRAM:

NGSPICE INPUT PLOT:
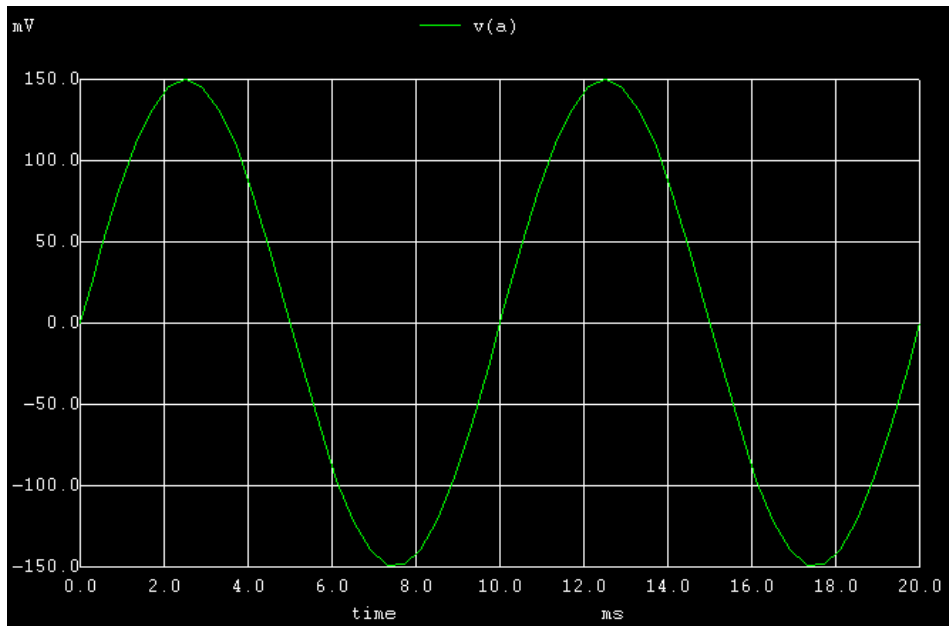
NGSPICE OUTPUT PLOT:

PYTHON INPUT PLOT:

PYTHON OUTPUT PLOT:

REFERENCE:

https://www.tutorialspoint.com/amplifiers/class_a_power_amplifiers.htm

CONCLUSION:

Thus the class A amplifier was designed and output waveform is obtained successfully using eSim software.