



AMERICAN INTERNATIONAL UNIVERSITY-BANGLADESH (AIUB)

Faculty of Engineering

Bachelor of Science in Electrical and Electronic Engineering (EEE)

BAE 2101: Computer Aided Design and Drafting

Experiment # 05: Introducing with Electrical Symbols used for Electrical Circuit Design and drawing some Electrical Circuits using AutoCAD.

Objective: To familiarize students with Electrical Symbols used for Electrical Circuit Design and draw some Electrical Circuits using AutoCAD software.

List of Electrical Symbols

Direct Current



Alternating Current



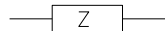
Resistor



Non-reactive
Resistor



Impedance



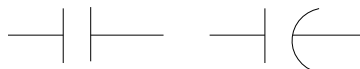
Inductor



Winding



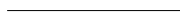
Capacitor



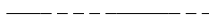
Earth



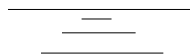
Line or cable:
existing

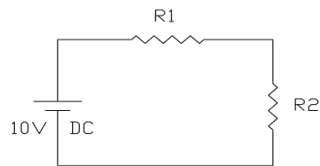


planned

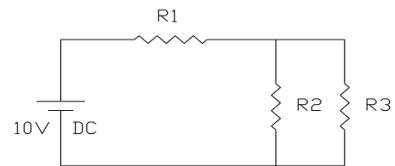


Underground Cable

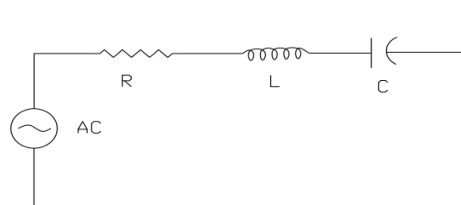


ELECTRICAL CIRCUIT DESIGN

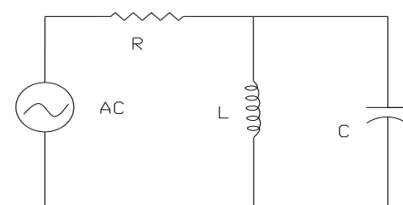
DC,SERIES



DC, PARALLEL



AC,SERIES



AC, PARALLEL

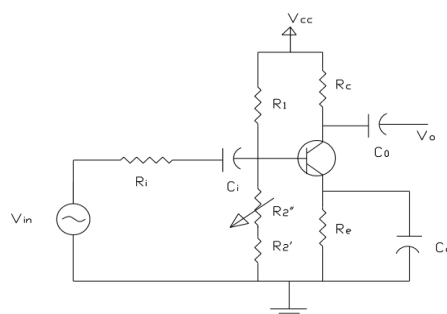


Figure: Common Emitter Amplifier Circuit

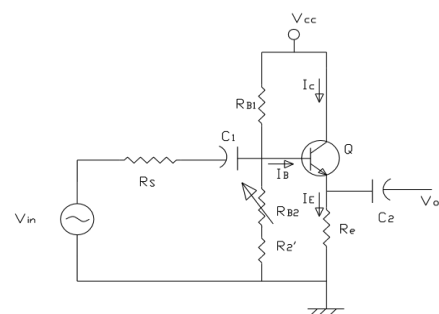


Figure: Common Collector Amplifier Circuit

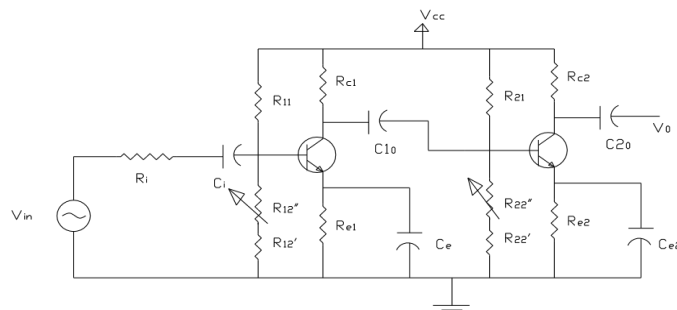
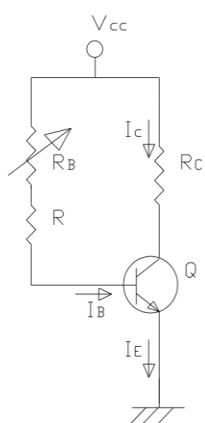
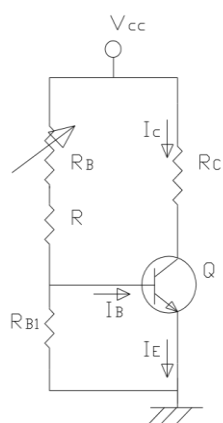


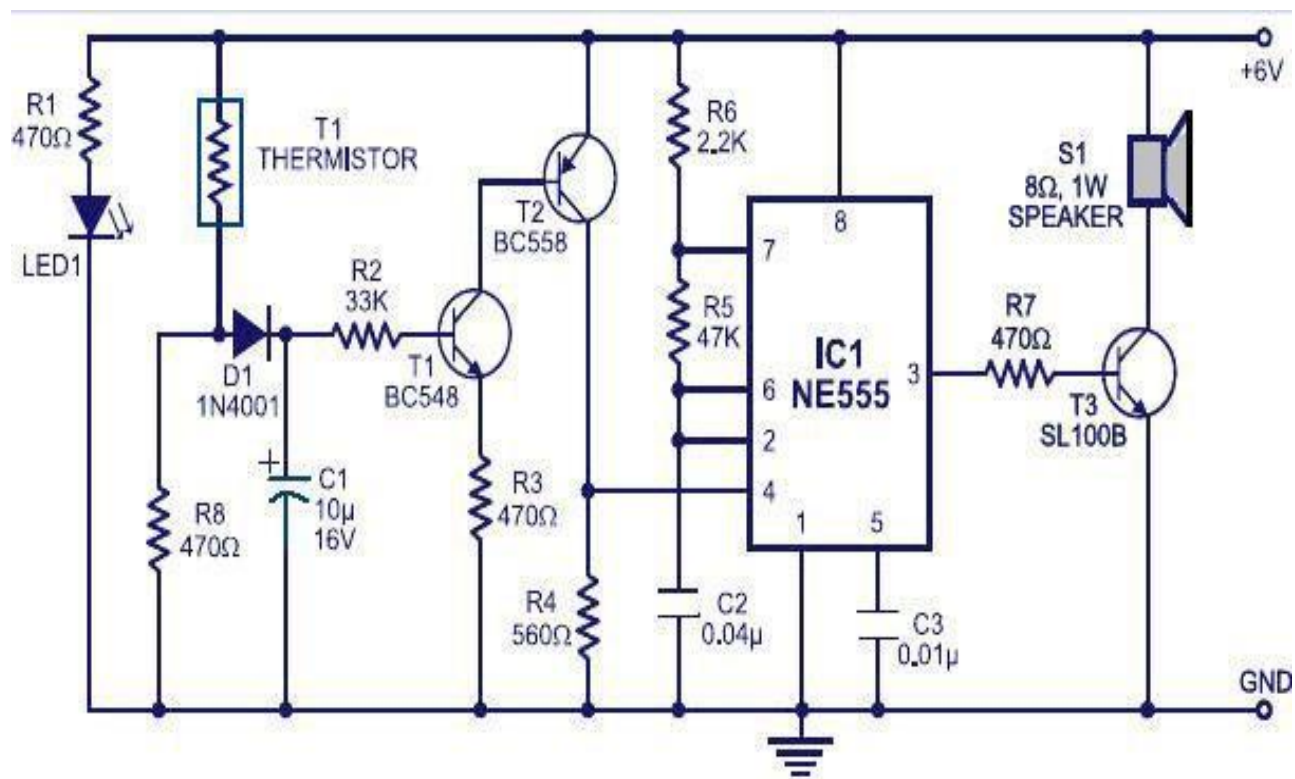
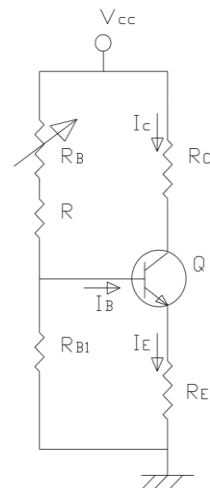
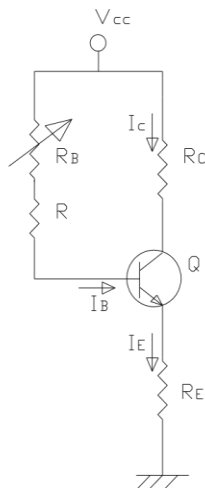
Figure: RC coupled two stage Amplifier Circuit

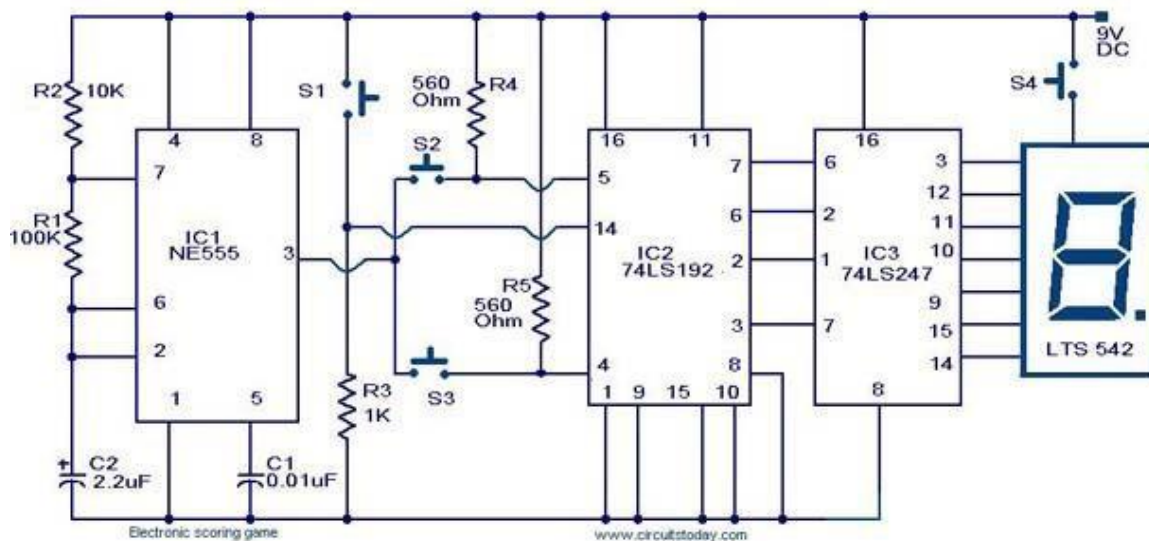
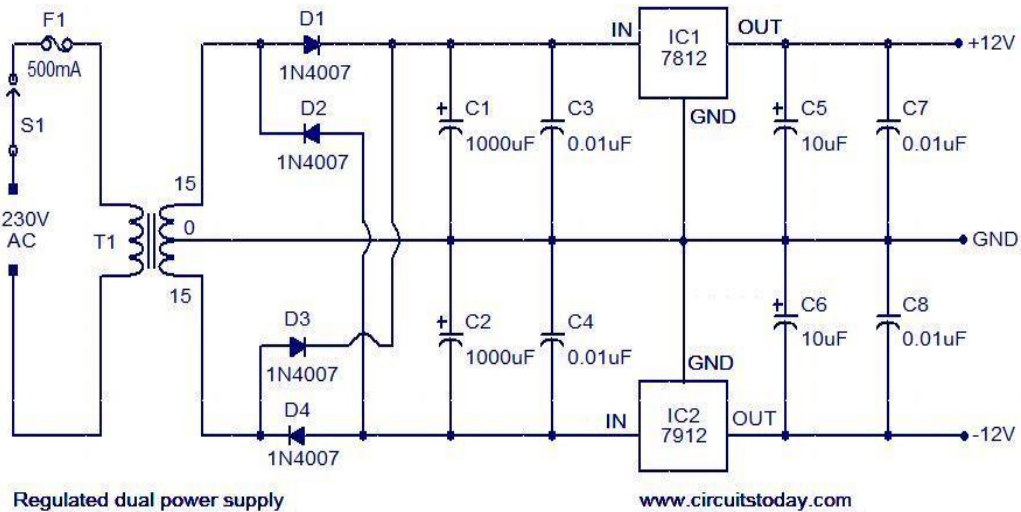
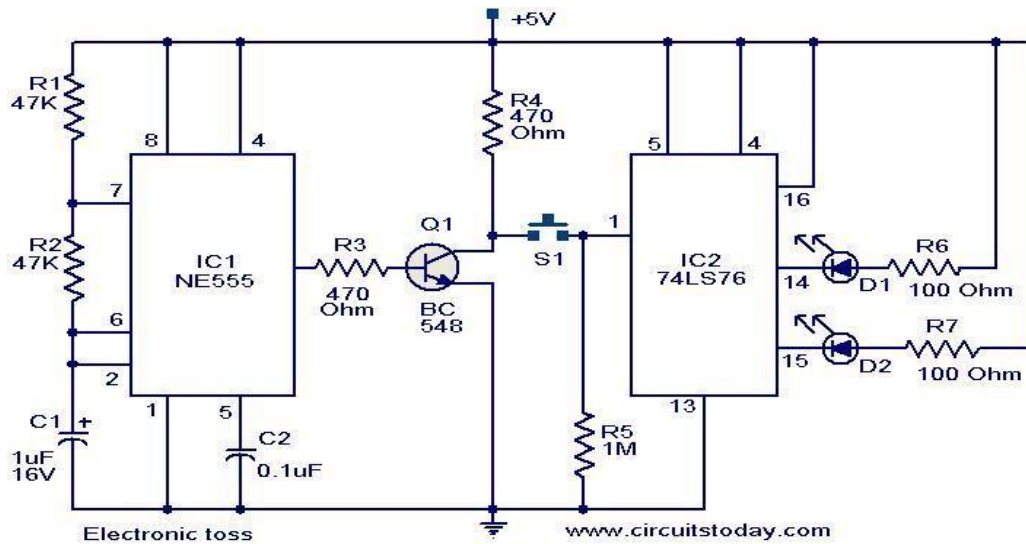


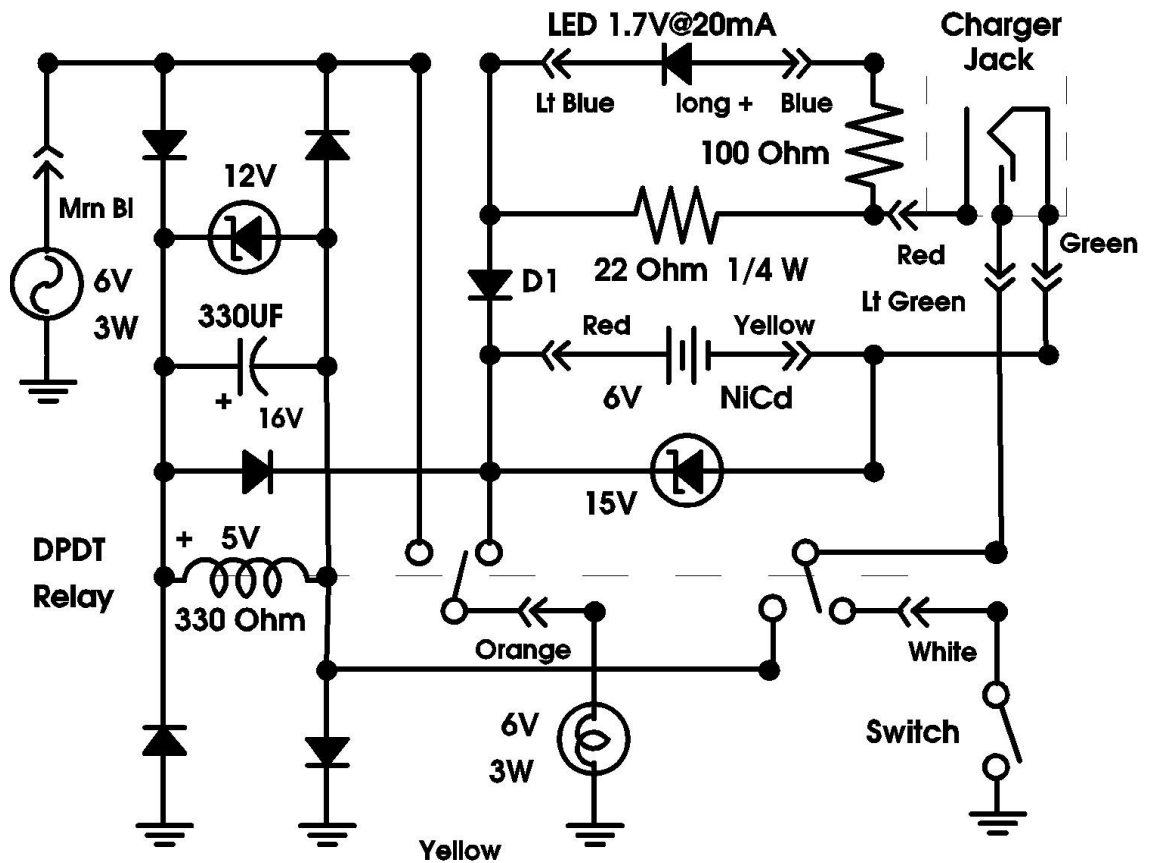
Fixed Bias Circuit



Self Bias Circuit







References:

1. Kristen S. Kurland, "AutoCAD 2004, 2D Training Manual".
2. Bob McFarlane, "Beginning AutoCAD 2004"
3. David Byrnes and Mark Mi