



## 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



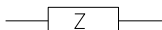
Resistor



Non-reactive  
Resistor



Impedance



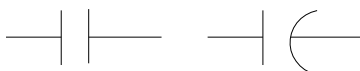
Inductor



Winding



Capacitor



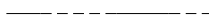
Earth



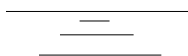
Line or cable:  
existing

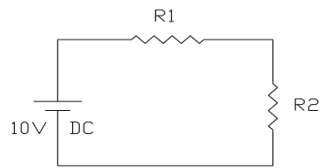


planned

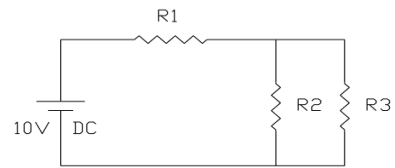


Underground Cable

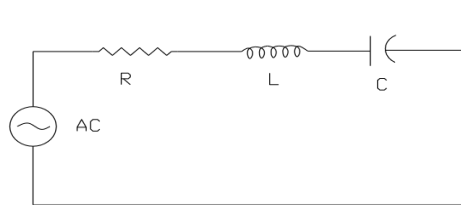


**ELECTRICAL CIRCUIT DESIGN**

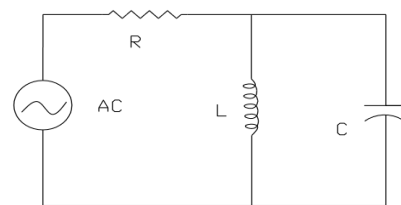
DC,SERIES



DC, PARALLEL



AC,SERIES



AC, PARALLEL

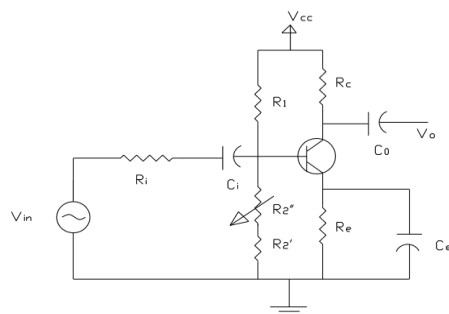


Figure: Common Emitter Amplifier Circuit

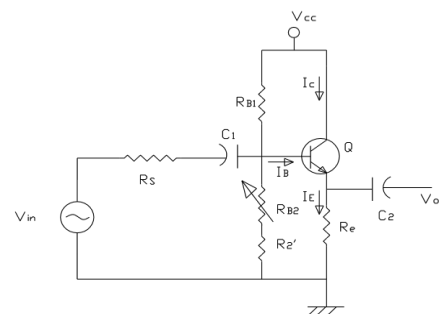


Figure: Common Collector Amplifier Circuit

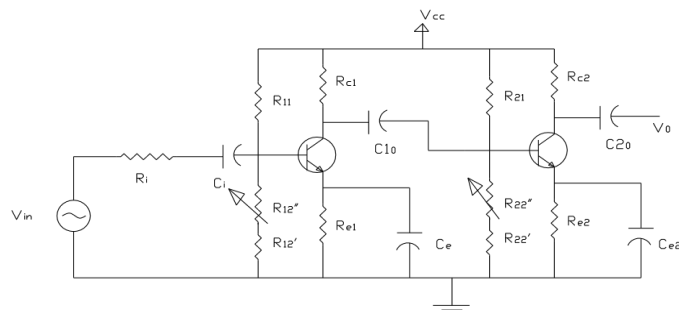
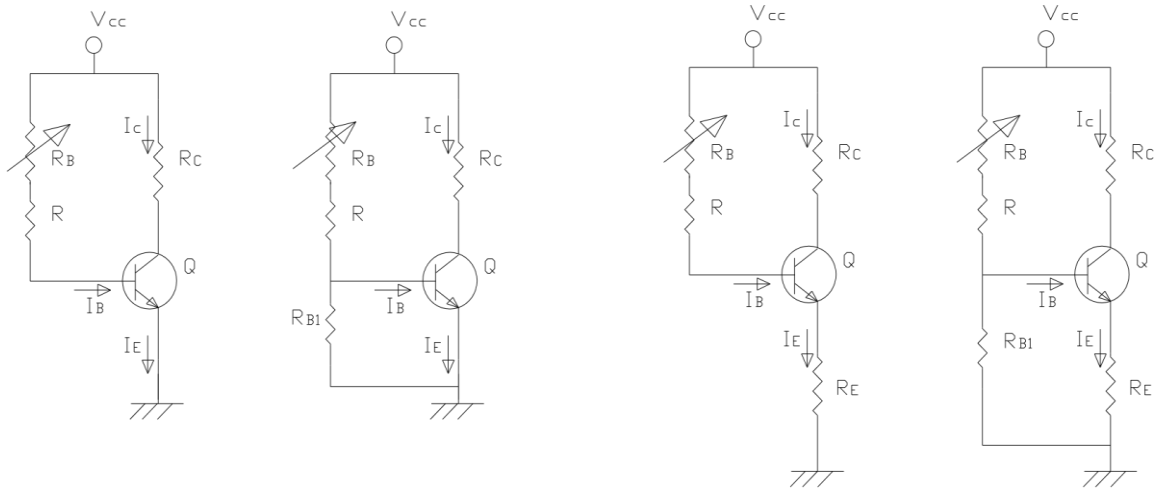
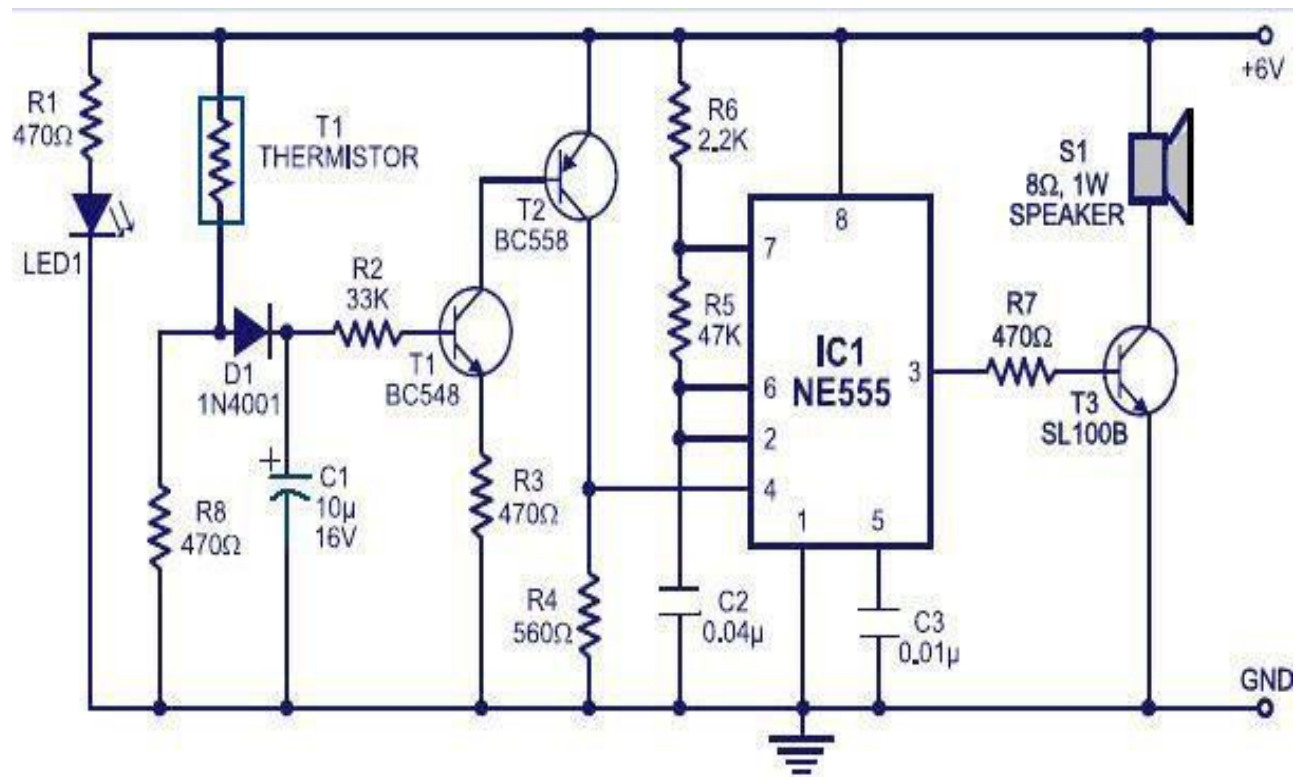


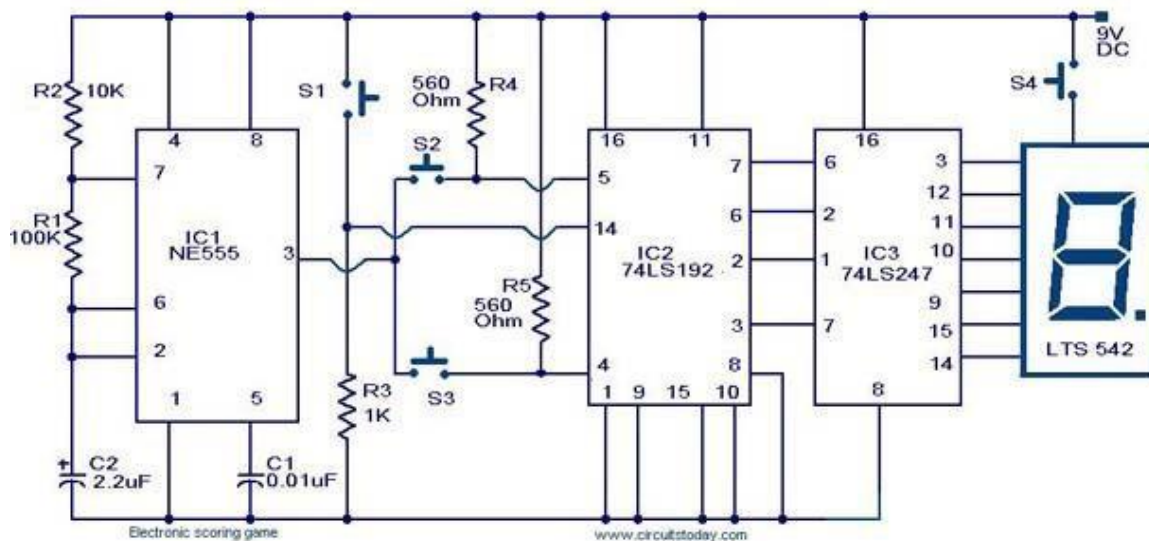
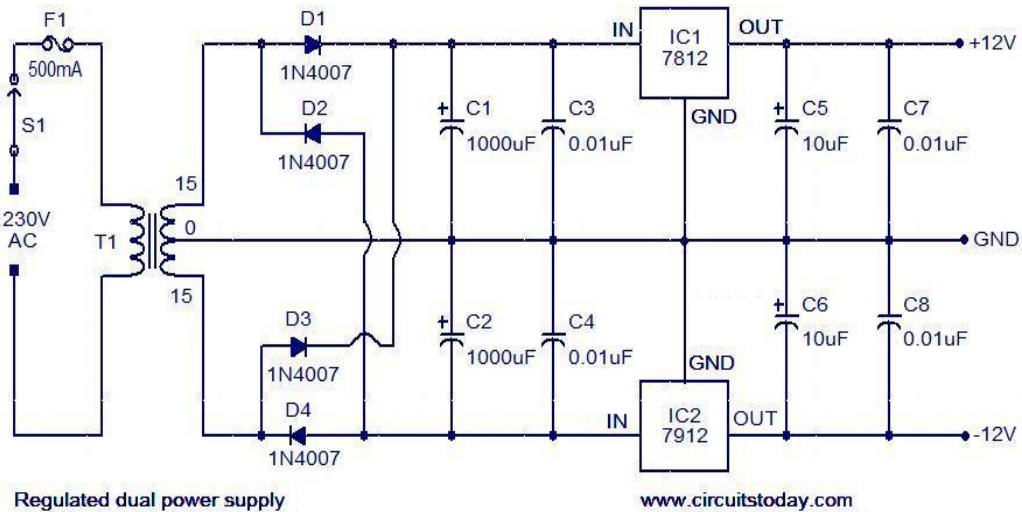
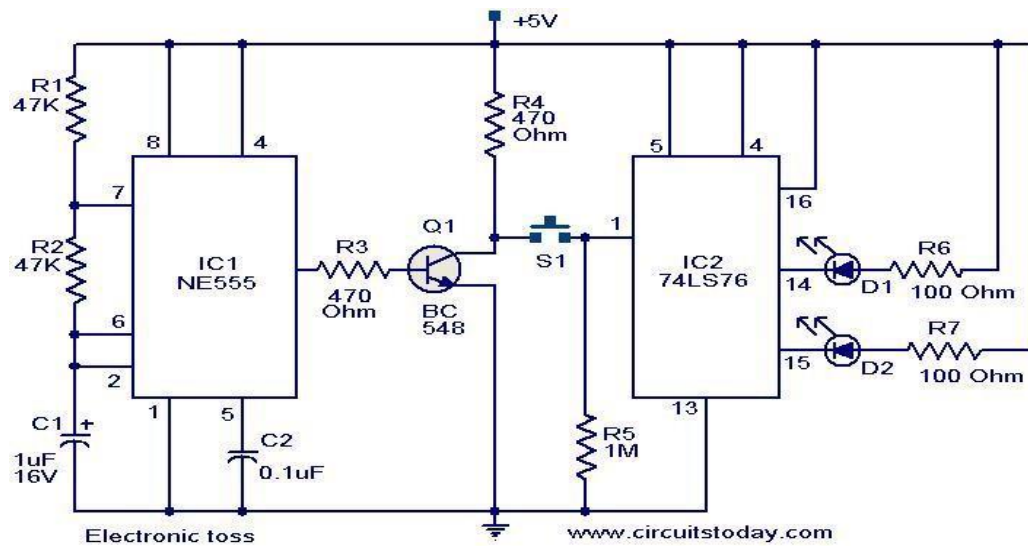
Figure: RC coupled two stage Amplifier Circuit

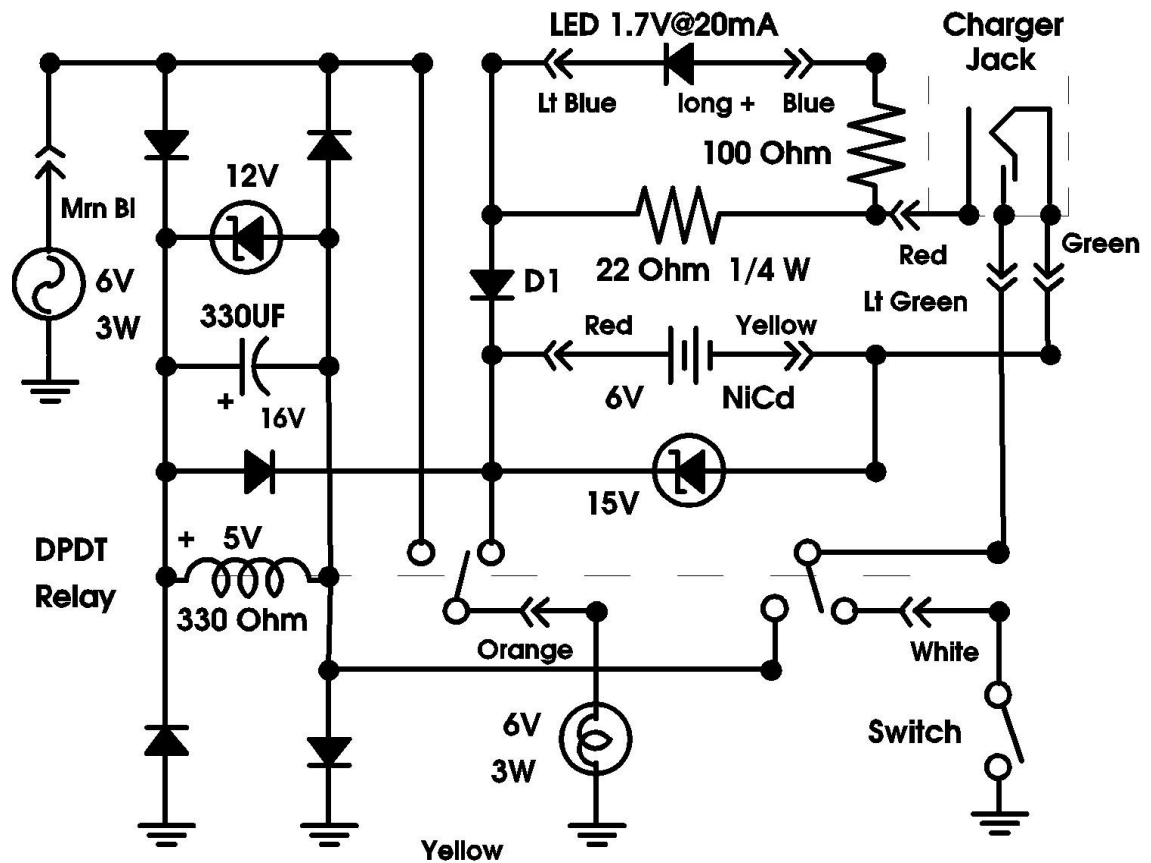


Fixed Bias Circuit

Self Bias Circuit







### References:

1. Kristen S. Kurland, “AutoCAD 2004, 2D Training Manual”.
2. Bob McFarlane, “Beginning AutoCAD 2004”
3. David Byrnes and Mark Middlebrook, “AutoCAD 2007 For Dummies”.