



## American International University- Bangladesh

Department of Electrical and Electronic Engineering

BAE1101: Computer Aided Design and Electrical Drafting

**Title:** Introducing with Electrical Symbols used for Electrical Circuit Design and drawing some Electrical Circuits using AutoCAD.

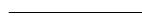
### Introduction:

The Primary objective of this experiment is-

1. To familiarize students with Electrical Symbols used for Electrical Circuit Design
2. To draw some Electrical Circuits using AutoCAD.

### LIST OF ELECTRICAL SYMBOLS

Direct Current



Alternating Current



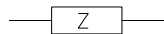
Resistor



Non-reactive  
Resistor



Impedance



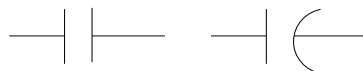
Inductor



Winding



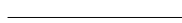
Capacitor



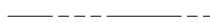
Earth



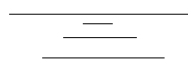
Line or cable: existing



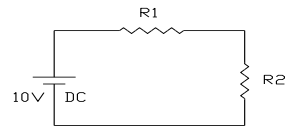
planned



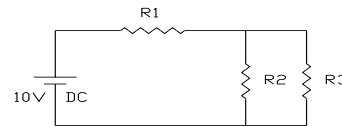
Underground Cable



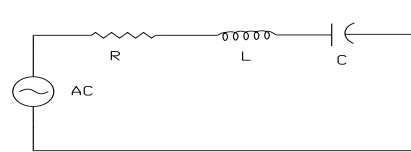
## ELECTRICAL CIRCUIT DESIGN



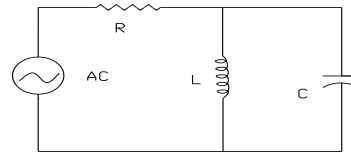
DC, SERIES



DC, PARALLEL



AC, SERIES



AC, PARALLEL

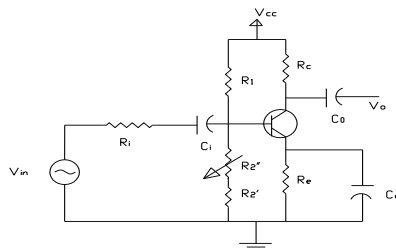


Figure: Common Emitter Amplifier Circuit

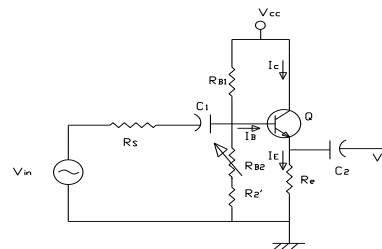


Figure: Common Collector Amplifier Circuit

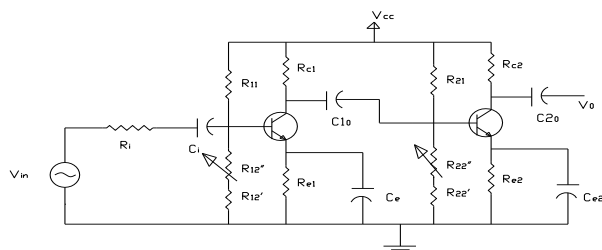
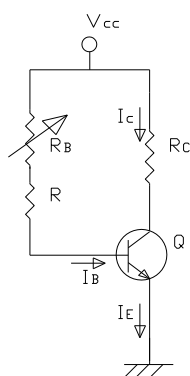
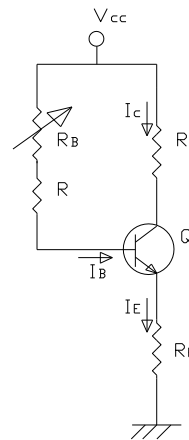
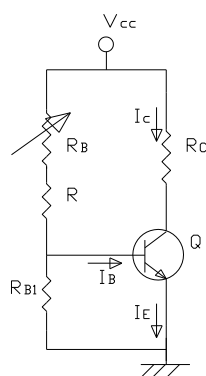


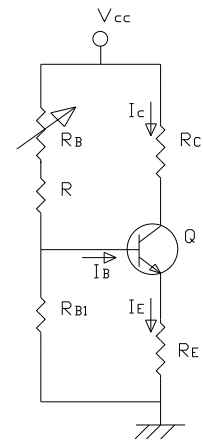
Figure: RC coupled two stage Amplifier Circuit

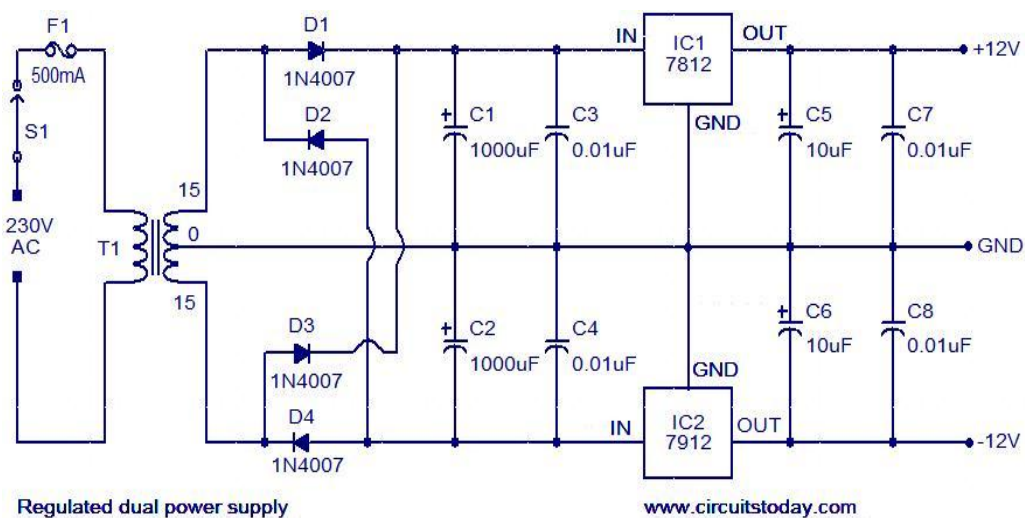
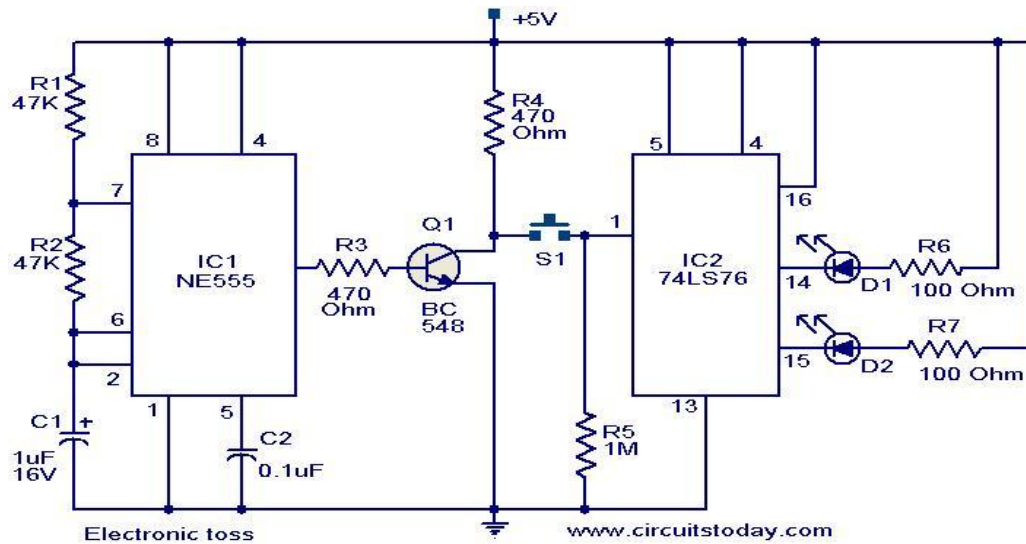
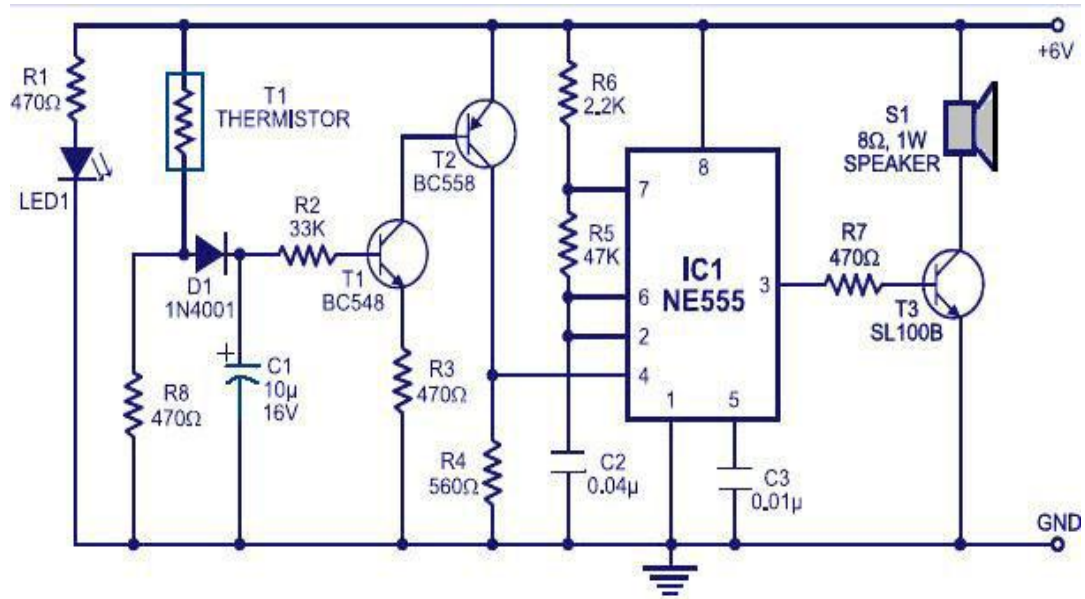


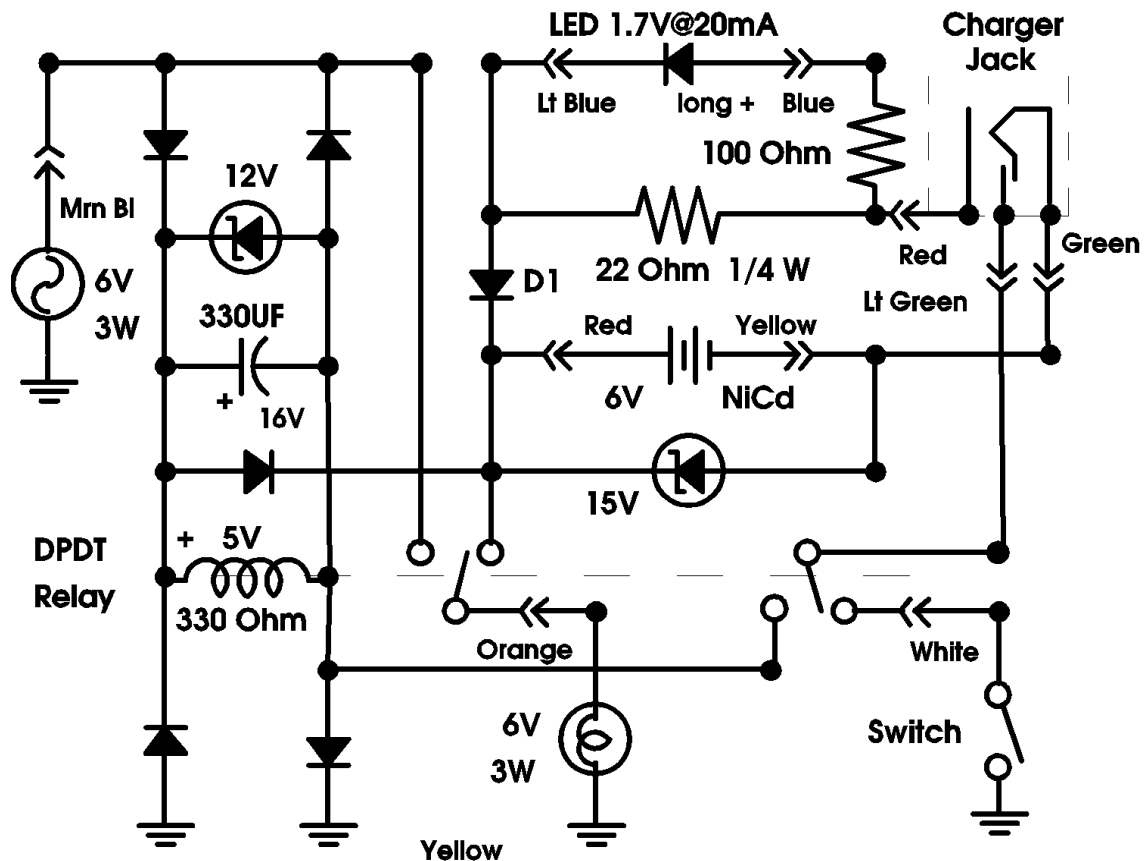
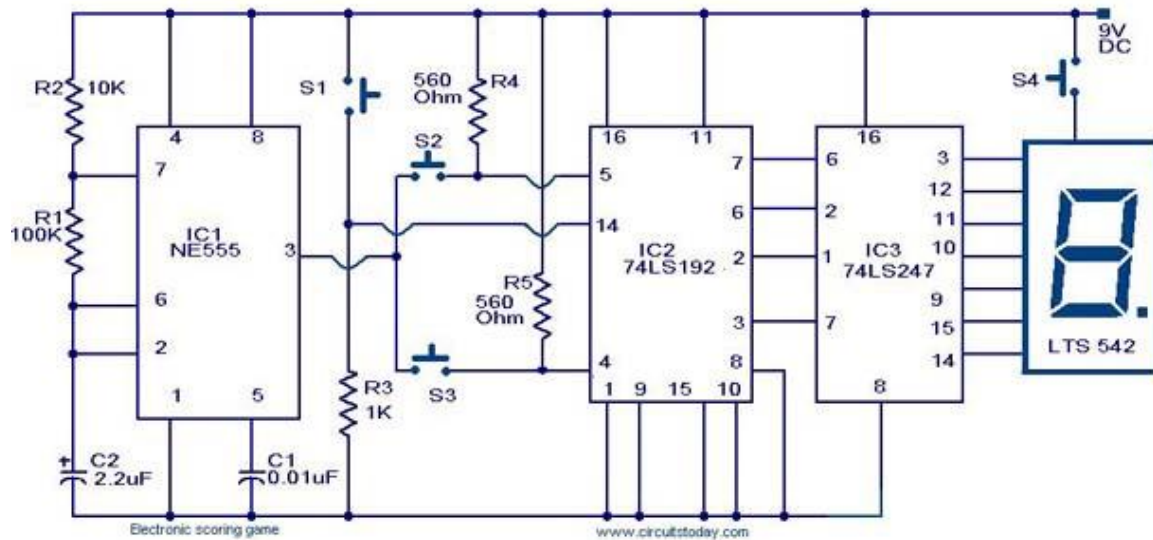
Fixed Bias Circuit



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".