

Circuit Simulation Project

<https://esim.fossee.in/circuit-simulation-project>

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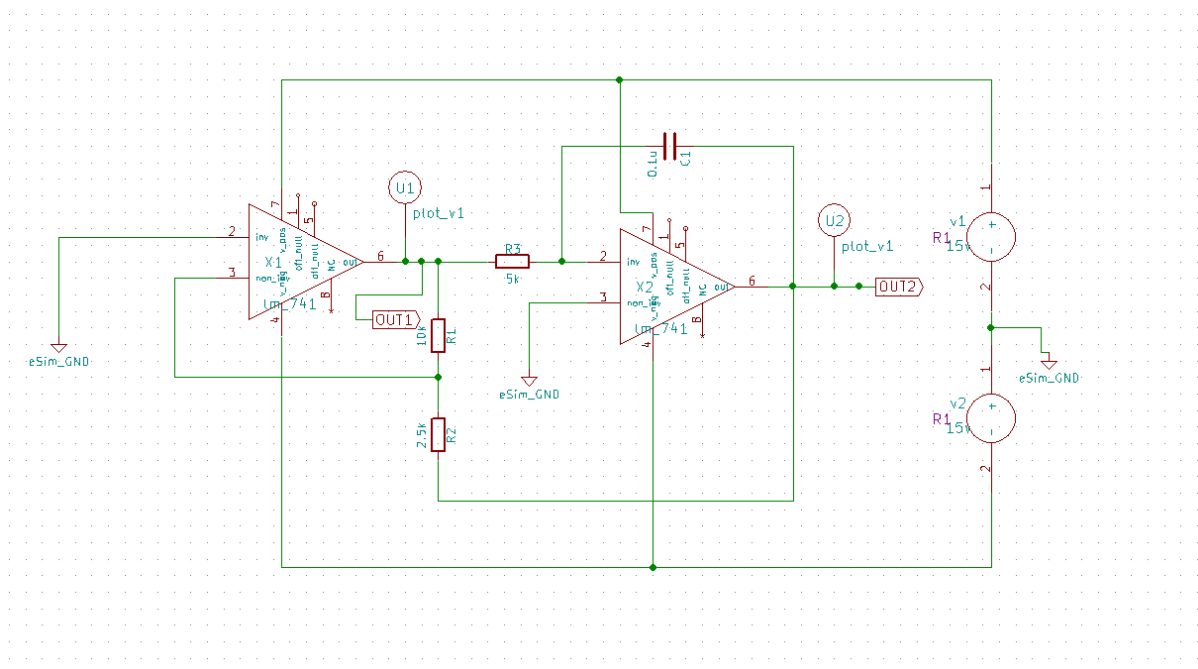
Title of the circuit : Waveform Generator using IC741 (OP-AMP)

Theory/Description : A waveform generator is an electronic circuit which generates many different types, frequencies and shapes of Signal waveform. The given circuit generates two types of waveforms:

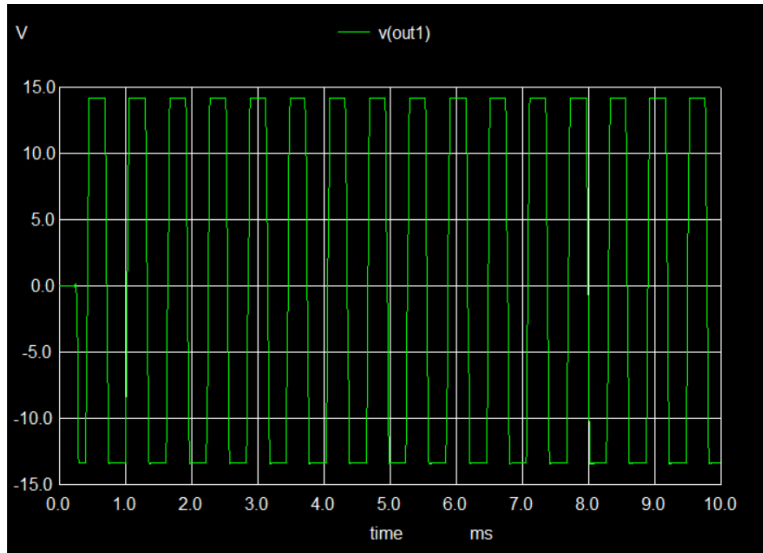
1. Square wave
2. Triangular wave

In the given circuit first op-amp acts as comparator or Schmitt trigger, generating a square wave and second op-amp acts as integrator which converts the square wave output from first op-amp into triangular wave

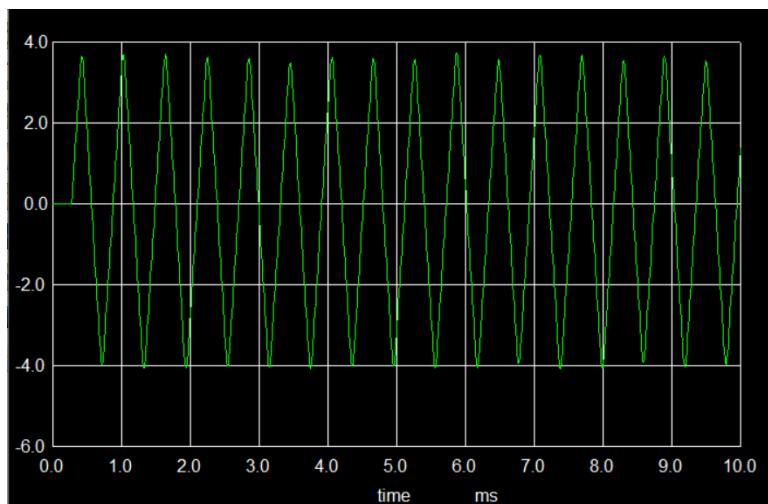
Circuit Diagram(s) :



Results (Input, Output waveforms and/or Multimeter readings) :



(a) Square waveform



(b) Triangular waveform

Source/Reference(s) :

Textbook : Ramakant A. Gayakwad, "Op-Amps and Linear Integrated Circuits", Pearson Prentice Hall, 4th Edition.