

Circuit Simulation Project

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

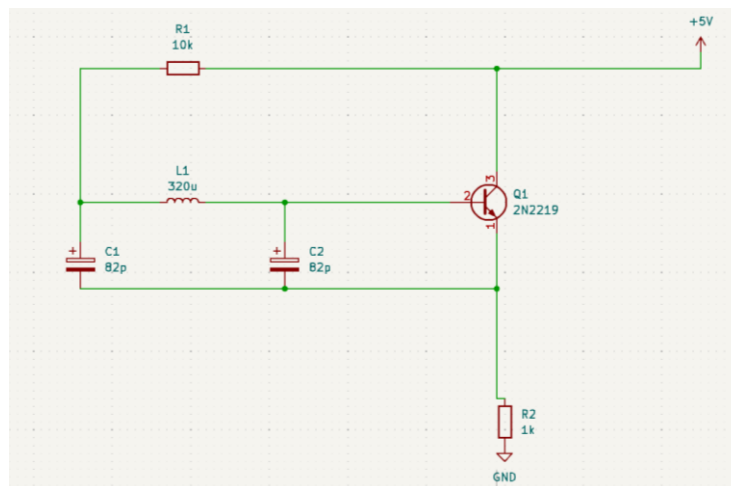
Name of Participant: Tanisha Tiwari

Title of circuit: Colpitts Oscillator circuit using transistor

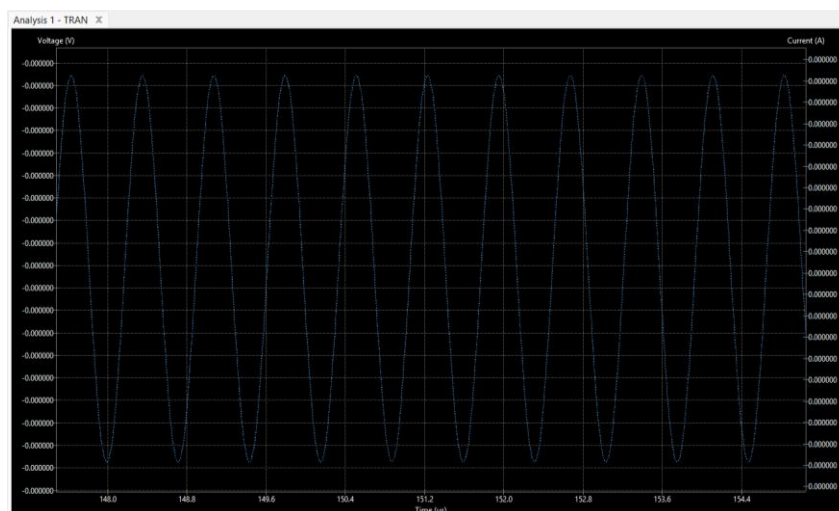
Theory: A Colpitts oscillator is a type of electronic oscillator that generates continuous oscillations using an active device (like a transistor) and a combination of inductors and capacitors. It works by providing positive feedback from a capacitive voltage divider to the transistor, which amplifies the signal.

Colpitts oscillators are widely used in radio frequency (RF) applications for generating stable signals.

Circuit:



Result:



Reference:

<https://www.electronics-tutorials.ws/oscillator/colpitts.html>

<https://www.elprocus.com/colpitts-oscillator-circuit-working-and-applications/>