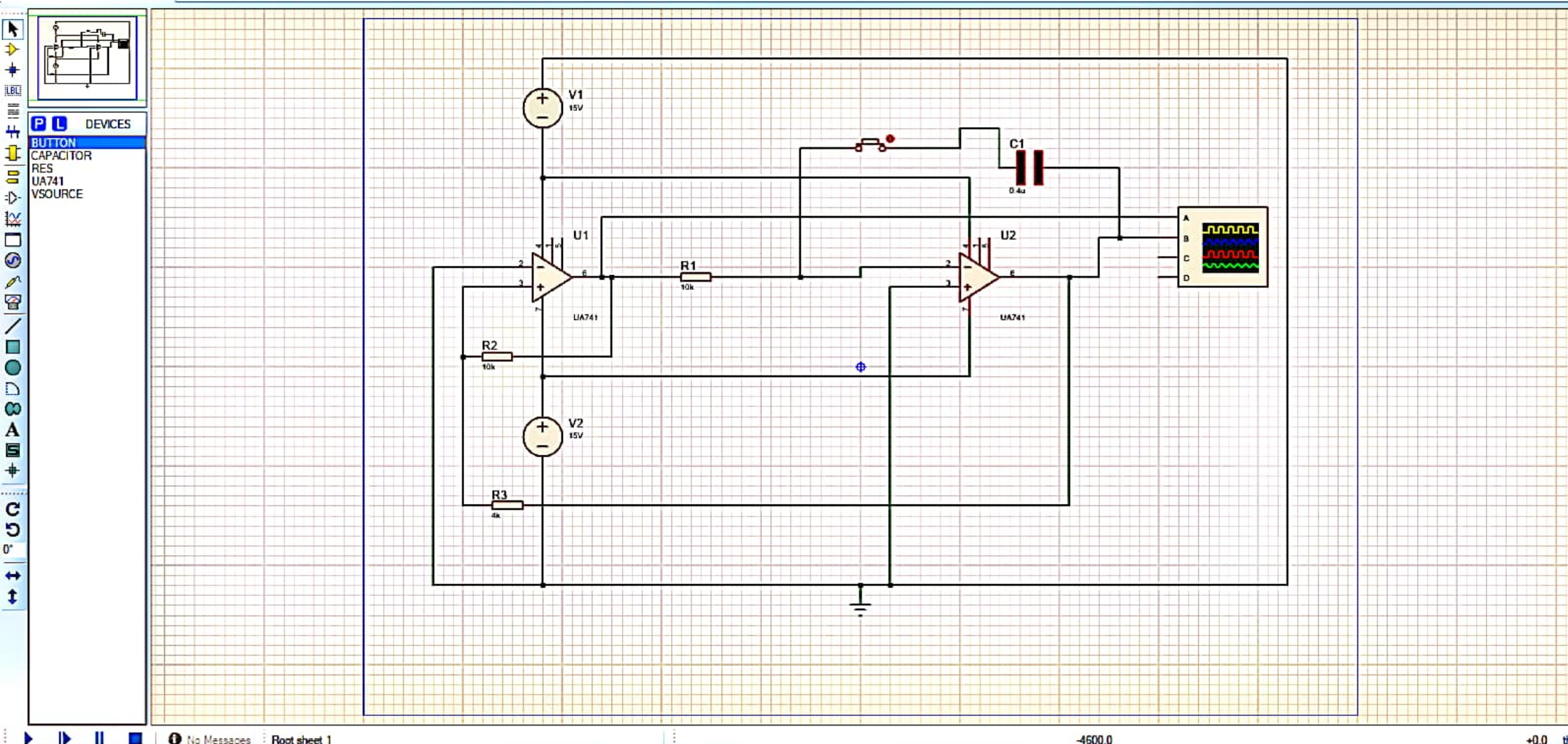


# Lab - Assignment - 5

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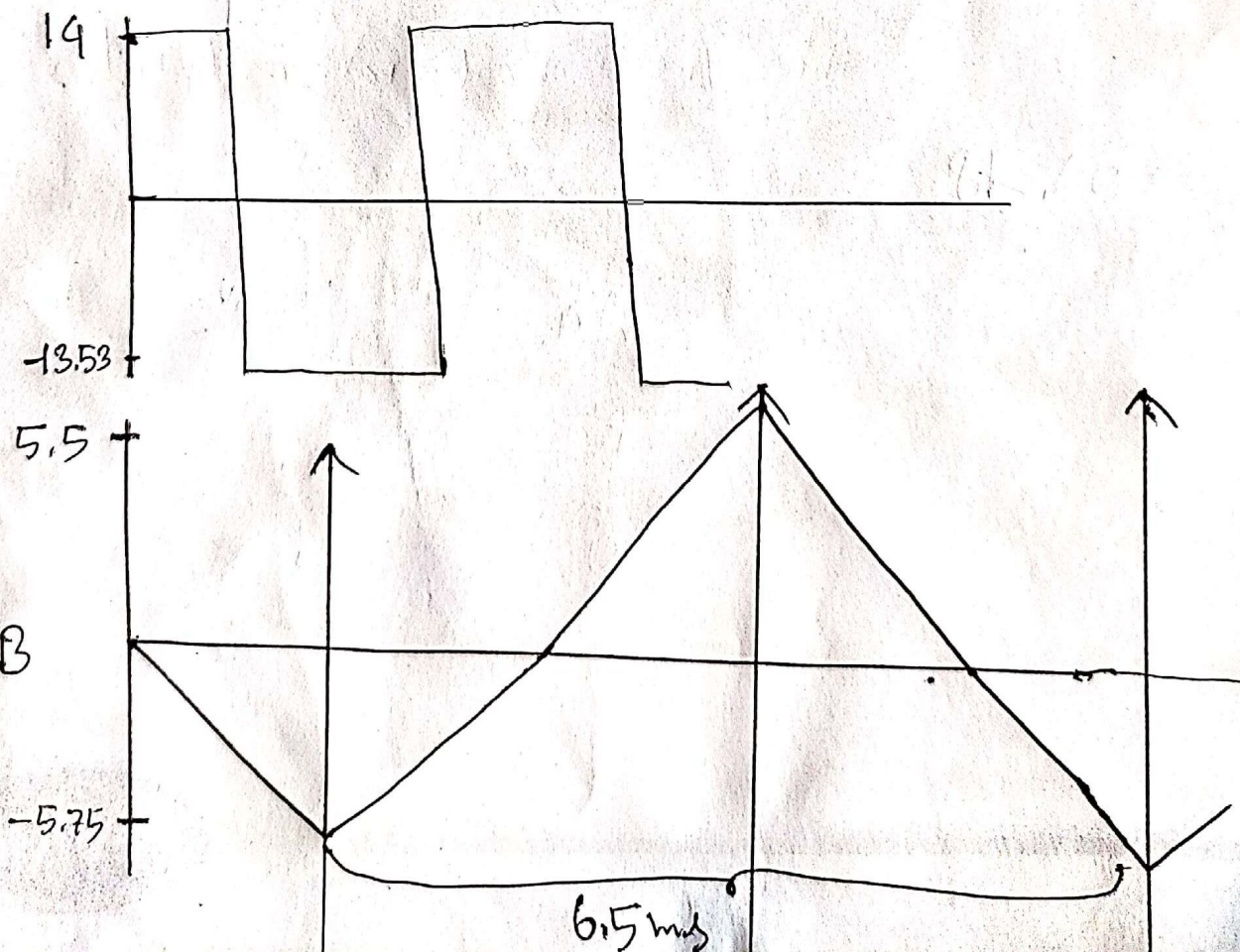


Data Table:

Theoretical Frequency (Hz)	Experimental Time Period, T (ms)	Experimental frequency, F (Hz)
156.25	6.5	153.84

Report:

1)





2) The triangular wave oscillator is composed of the Schmitt circuit and the integration circuit. In case of the turning on, the output of Schmitt circuit becomes the positive or negative saturated voltage. The electric current flows through the capacitor  $C$  through the resistor  $R_1$  when the A point becomes positive. When the electric charge begins to store up in the capacitor, voltage of the both edges of capacitor begins to go up, then the voltage of the output (the B point) of the integration circuit falls gradually.

When C point voltage fall below 0V, A point voltage changes into the minus rapidly and the B point voltage rises gradually.

When C point voltage exceeds 0V, A point voltage changes into the plus rapidly.



This changes the B point voltage to the direction of the negative. The condition of  $R_2 > R_3$  is necessary for both cases.

3) No, the integration circuit can not be implemented with an inductor.