



# SHORT CIRCUIT

## HARDWARE DESIGNATHON

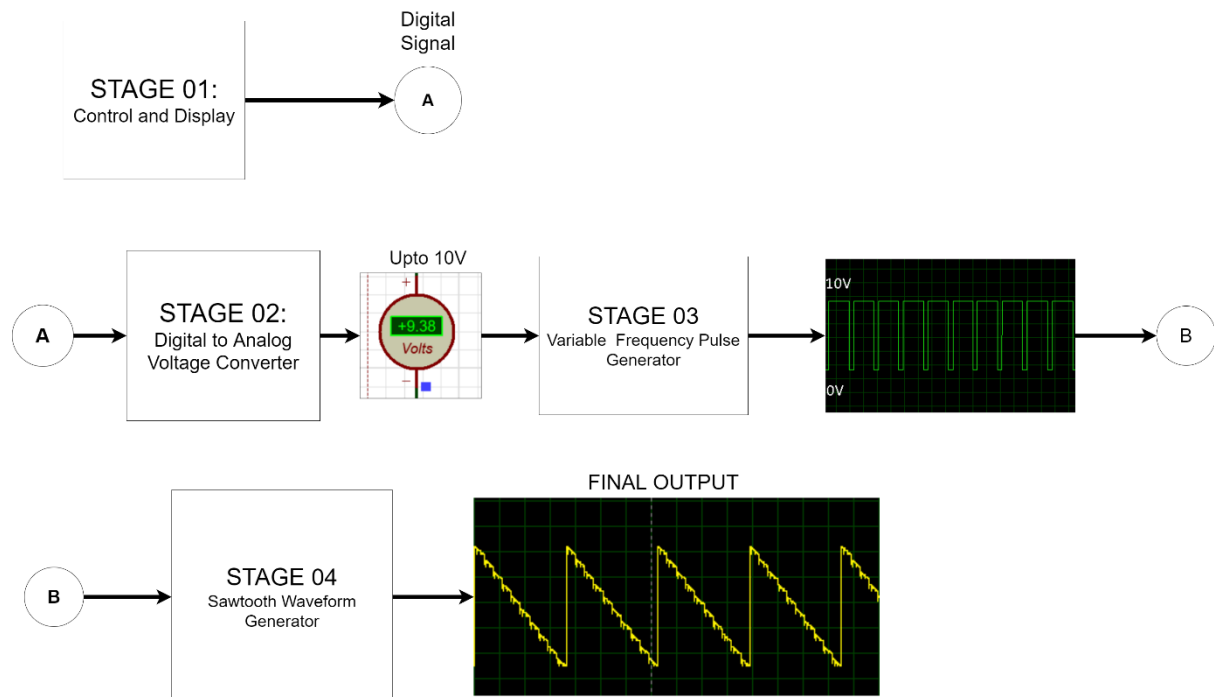


### For Third Year Students

#### Problem Statement:

Mr. Suresh is working as a testing and measurement engineer at 'Advanced Control Equipments' (a Laboratory equipment provider). He has observed that the times per division knob of a Digital Oscilloscope is not functioning properly, and needs to be re-designed. The following is the block diagrammatic representation of Saw-Tooth waveform generator, which may replace the non-functional part of the horizontal section of the DSO and this may help him to use the times/division knob effectively.

#### Block Diagram:



#### Permitted Inputs:

- 1.) Mains (230V AC)
- 2.) Keypad

#### Expected Output:

1. Saw Tooth Waveform
2. On LCD => "Short Circuit Designathon" + Keypad Input(dynamic)

**ALL THE BEST!!!**