



Lab Report Sheet

Experiment Title:	Familiarization with Visual Designer for Arduino™ AVR and Raspberry Pi and implementation of a traffic control system using Drag -Drop -Play.		
Experiment No:	3	Date of Submission:	22 February 2022
Course Title:	Microprocessor And Embedded Systems		
Course Code:	00499	Section:	F
Semester:	Spring	2021-22	Course Teacher: Dr. Nadia Anam

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FACULTY COMMENTS	Marks Obtained	
	Total Marks	

Title: Familiarization with Visual Designer for Arduino™ AVR and Raspberry Pi and implementation of a traffic control system using Drag -Drop -Play.

Introduction: The objective of this experiment is to get familiarized with Proteus Visual Designer. Learning to make embedded system using Drag -Drop -Play method. Implementation of a traffic control system using Drag -Drop -Play method.

Theory and Methodology:

Proteus Visual Designer combines world class Proteus VSM simulation with an easy-to-use flowchart editor and a gallery of virtual hardware to provide a truly integrated and intuitive development environment for Arduino and Raspberry Pi. Proteus design it's a windows application for schematic capture, simulations and printed circuit board layout design. The peripheral gallery makes hardware design easy. The software is designed as a flowchart through which we can easily drag and drop these methods along with decisions, delays and assignments to drive the hardware. We can compile and simulate at the press of the button, and can watch the design live on screen. Finally, we can transfer to the physical hardware with a single mouse click and see it working first time in the real world.

Simulation Design:

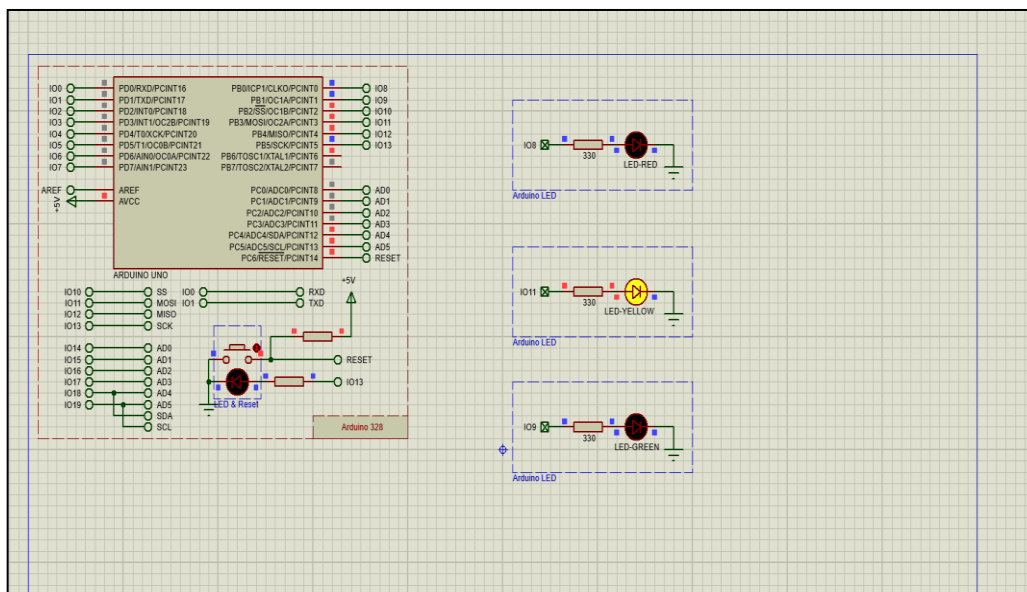


Fig: Schematic design

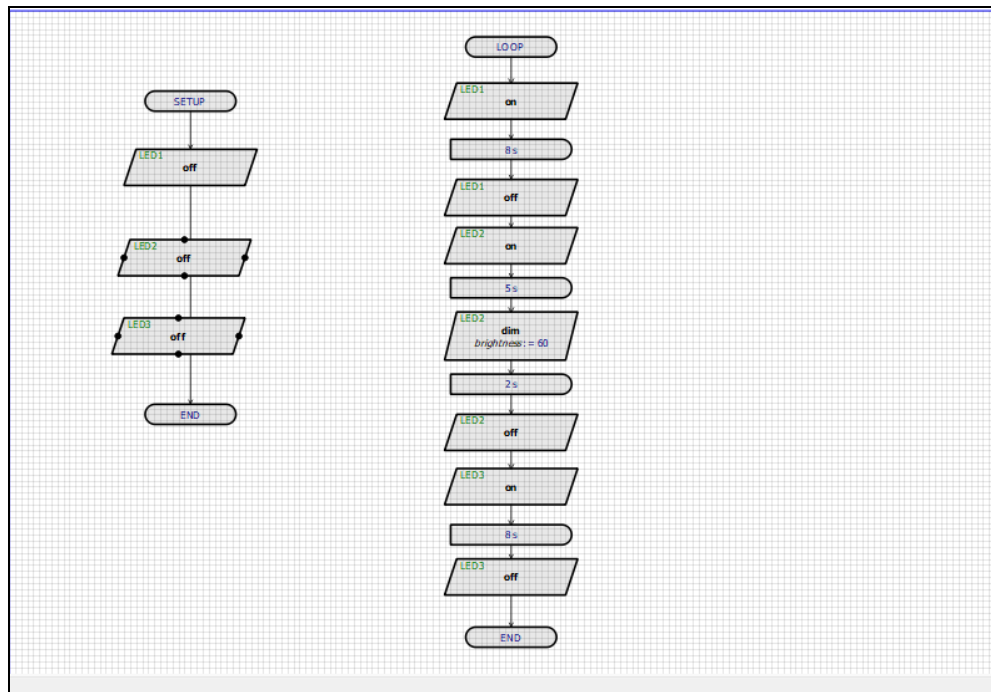


Fig: Flowchart

Discussion: In this experiment, we have used Proteus Visual Designer software and we got familiarize with designing the hardware schematic designs, where through the flowchart it controls the program of the hardware. We have performed the traffic light system, how it functions through this Proteus software.

References:

- 1) <https://www.arduino.cc/>.
- 2) <https://www.labcenter.com/visualdesigner/>
- 3) <https://youtu.be/yHB5it0s2oU>