Traffic Light Controller

" Analog Communication: Mini Project"

Aim:

To design Density based traffic light controller using Arduino.

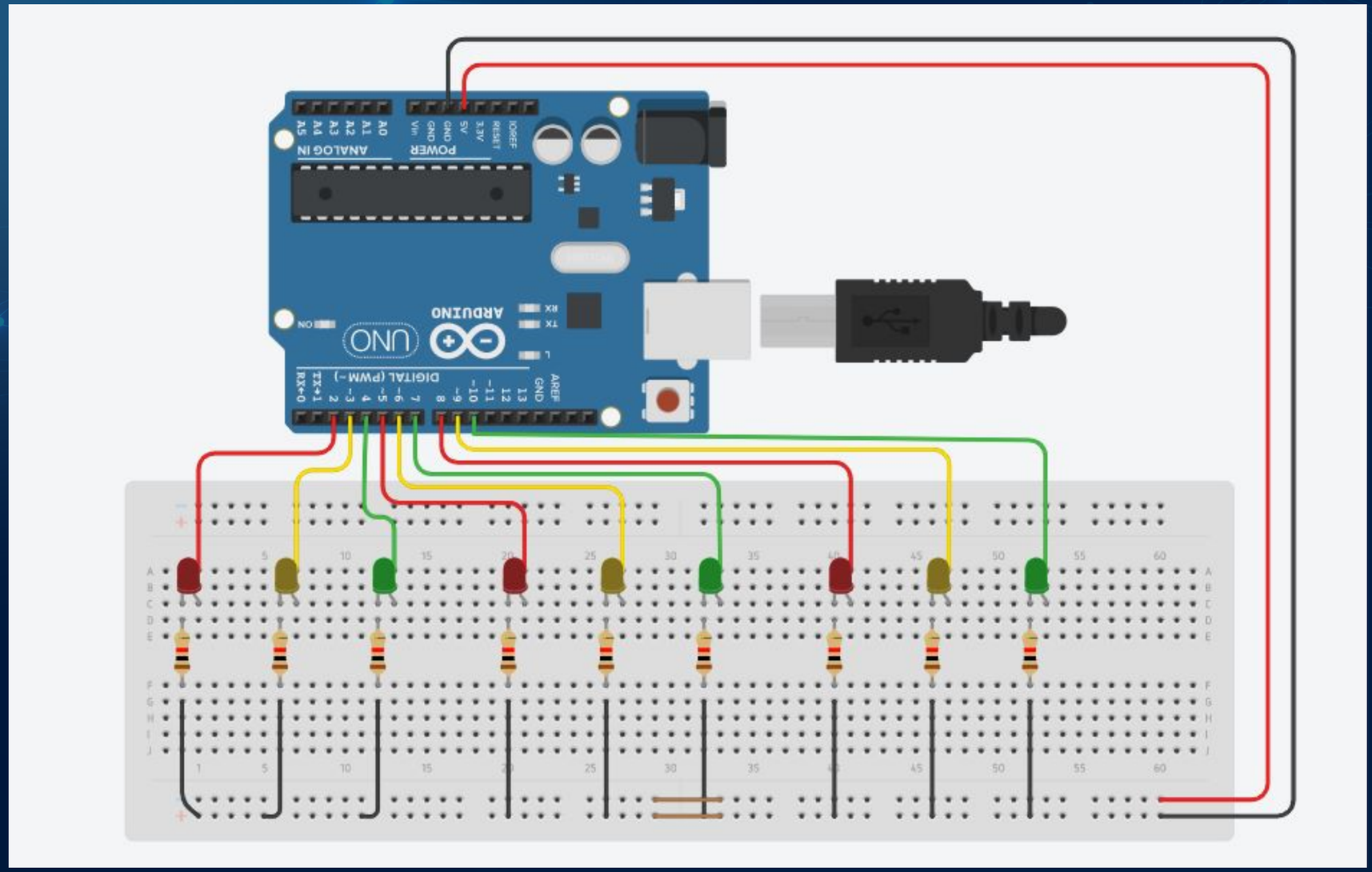
Objective:

Designing a density based traffic light controller where density input is generated via the code randomly.

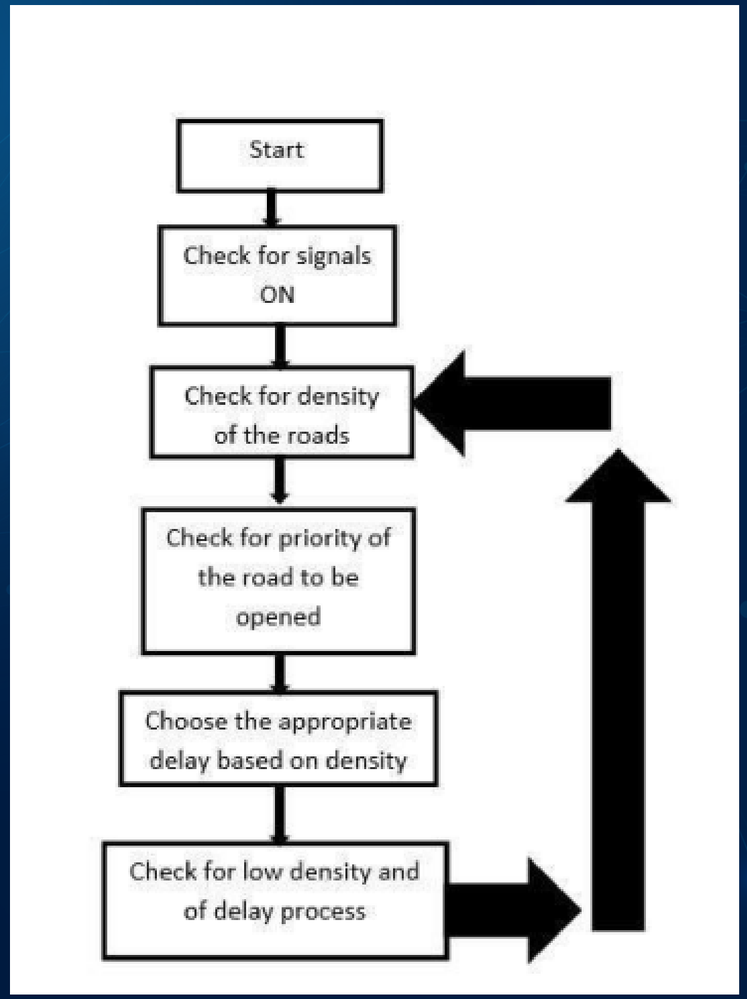
Project concept:

- Traffic congestion is a severe problem in most of the cities across the world and it has become a nightmare for the citizens.
- It is caused by delay in signal, inappropriate timing of traffic signaling etc.
- The delay of traffic light is hard coded and it does not depend on traffic.
- Therefore, for optimizing traffic control, there is an increasing demand in systematic quick automatic system.

Circuit Diagram:



Block Diagram:



Demo:

Online Simulation:

https://www.tinkercad.com/things/88empaOLBwa-stunning-krunk/editel?sharecode=b-AbRrOnqf-404vjrVPOL5kyxeIRZ6RREHEN0c_tG2E

- In a three way street the traffic light controller works on the basis of density and higher traffic areas are provided green light.
- While in our case as the density is produced via the code randomly it generates the required lighting as per the density.

RESULT

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Thank You