## **Traffic light signal**

**Project Proposal (DLD)**

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**Description:**

This project on logic works will focus on building a full functioning traffic signal situated in a square with four lights. There will be four poles and three lights mounted on each pole. Red, green and yellow light lights indicate ‘wait’, ‘go’ and ‘get ready’ state in each lane.

**Functioning:**

In other words, goal is to ‘switch on’ and ‘switch off’ the selective LEDs automatically over specific interval of time.

**1: creating time Intervals**

1.1: Time intervals and delays can be created by making repeated intervals and counting those intervals by counter.

**2: Multiple states**

2.1: 2-4 line decoder is more than enough for three states (Red, green, yellow).

2.2: input to decoder will be output of selected data lines by another circuit which is changing its state over specific intervals.

**3: Changing states**

3.1: D-flip-flop can be used to keep track of current state and next state as well.

**4: Signal Lights:**

4.1: LEDs (Red, green, yellow) will be used to the binary output of circuits.

**Application:**

Traffic signals are very famous and are planted everywhere to control the traffic. This circuit can be used as a guide for local producers so that it can be built rather than importing at high prices.