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**ABSTRACT**

Traffic light control systems are widely used to monitor and control the flow of automobiles through the junction of many roads. They aim to realize smooth motion of cars in the transportation routes. The fundamental idea of this simple electronic project is to control the traffic. It can be used to avoid the vehicular collisions and traffic jams.

This project is a demonstration of traffic controlling using PLC in all the directions, although it can be further modified as well and sensors can be added as per the requirements. Project will work in a way; it provides the instruction to the driver whether to drive through the intersection or stop before the intersection. Traffic control lights are fed for traffic control on streets and roadways, especially at junctions. The traffic signals are cyclically displayed through a suitable timing and control technique.The PLC offers a simpler solution for modifying the operation of a control system. Almost any production process can greatly enhance using this type of control system, the biggest benefit in using a PLC is the ability to change and replicate the operation or process.

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