Requirement Gathering:

Customer want a software for functioning of traffic light having colour Red, Yellow and Green Having a timer of 55 sec for Red, 5 sec for yellow ,55 sec for Green and if there is problem in the input then it should handle the error.

Design:

Alorithm:

Step 1 -: Start

Step 2 -: Input color are red, orange, green

Step 3 -:Input RGB color codes for red, orange, green

Step 4 -: User can set timer according to his requirement.

Step 5-: input loop condition as while(1) so that the use can firstly put the time input and then the code shall start.

Step 6-: display the light sequentially.

displayLight(255, 165, 0, "Orange Light\n")

Step 7-: Stop

Implementation:

WE are performing this practical in C language as per the requirement of the project

Testing:

We have successfully excuted the program which is the simulation of the traffic light

Deployment:

We have publish code on GITHUB

Maintenance:

In this we will apply 25% maintenance rule that is if maintenance is more than 25% then replace the module, upgrade or rebuild the software.