Task 1

All Possible Traffic Light Combinations

**Aim :**

To list out all possible combinations of the traffic light combinations for a single traffic signal light along with the modes.

**Use :**

In Function **Set TSL Mode [ set\_tsl\_mode(traffic\_light\_t \*tsl,int mode) ]**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Mode** | **red** | **yellow** | **forward** | **left** | **right** | **Description** |
| **1** | 1 | 0 | 0 | 0 | 0 | Red - Stop |
| **2** | 0 | 1 | 0 | 0 | 0 | Yellow - Slow |
| **3** | 0 | 0 | 1 | 0 | 0 | Forward Only |
| **4** | 1 | 0 | 0 | 1 | 0 | Left Only |
| **5** | 1 | 0 | 0 | 0 | 1 | Right Only |
| **6** | 0 | 0 | 1 | 1 | 0 | Forward and Left |
| **7** | 0 | 0 | 1 | 0 | 1 | Forward and Right |
| **8** | 0 | 0 | 1 | 1 | 1 | Forward, Left and Right |
| **9** | 0 | 0 | 0 | 1 | 1 | Left and Right |

\*Here the varibles red, yellow,forward,left and right are from members of the structure traffic\_light.