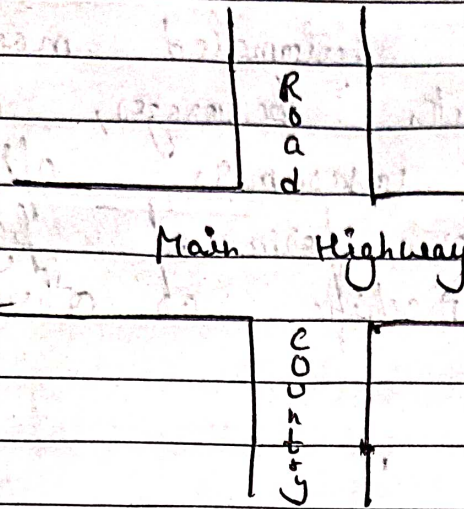


Traffic Signal Controller



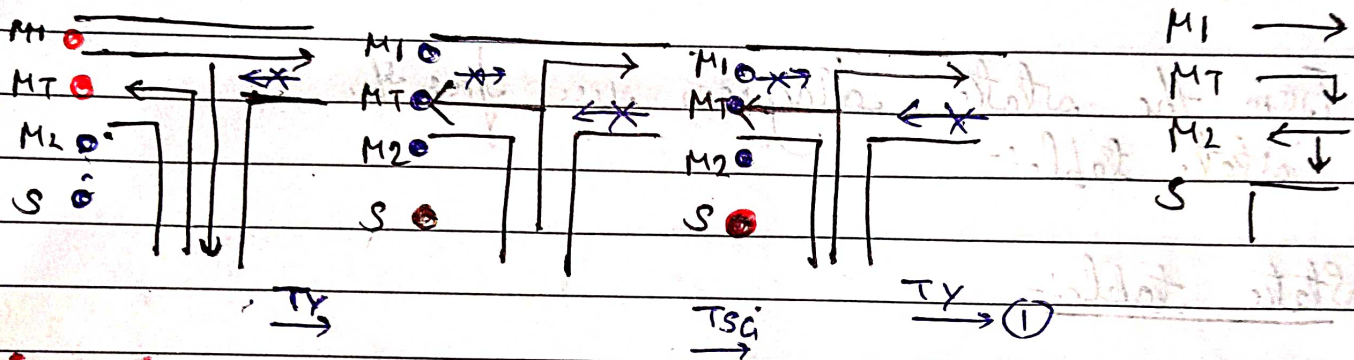
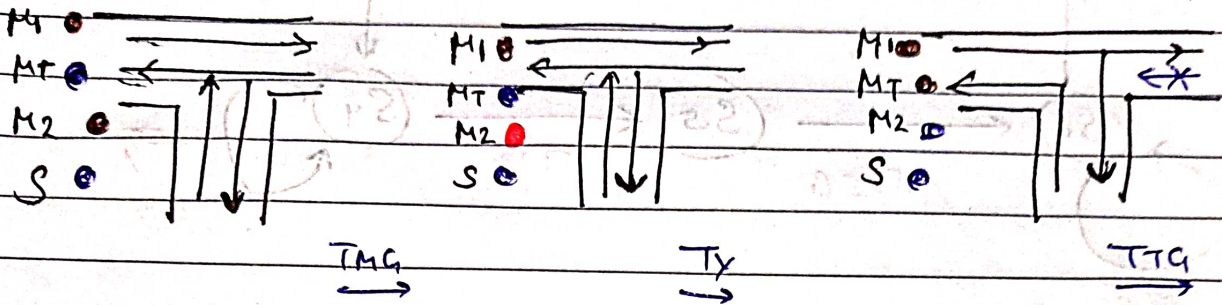
- The traffic signal for the main highway gets highest priority because cars are continuously present on the main highway. Thus, the main highway signal remains green by default. Occasionally, cars from the country road arrive at the traffic signal. The traffic signal for the country road must turn green only long enough to let the cars on the country road go.

• Problem Statement:-

The aim of the project is to design a traffic controller for a T-intersection.

Date

- Let's understand the problem statement through the image given below.



Green → ●
Yellow → ●
Red → ●

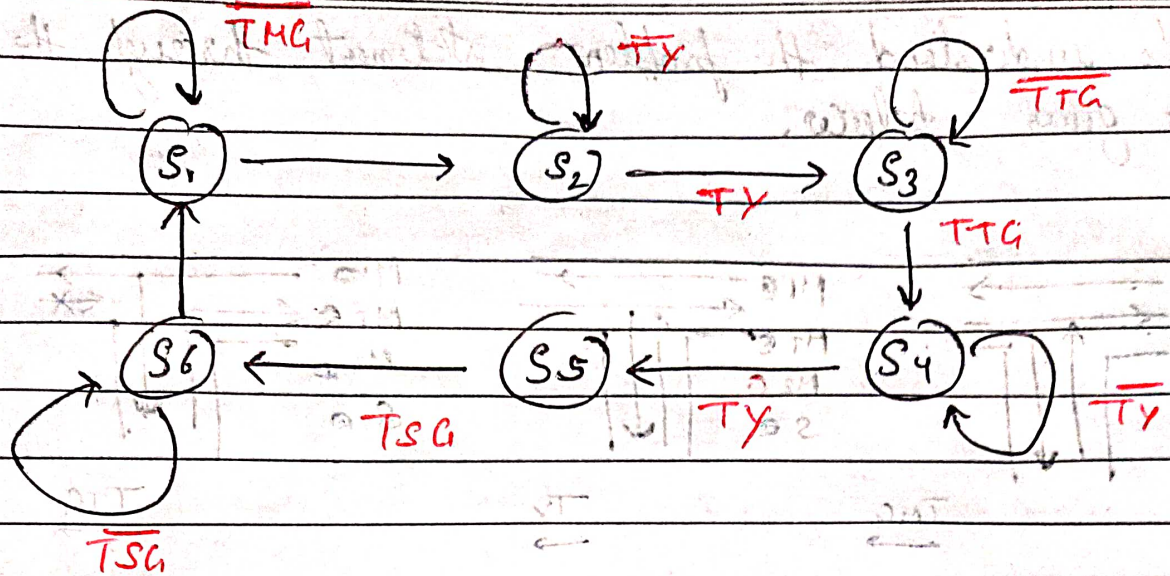
- The six classes present here eventually turn to the six states.

TMC - 7s

TY - 2s 10

TTG - 5s

TSG - 3s 0



* From the state diagram we form the state table:-

• State table:-

Present state ABC	Input	NS $A^+B^+C^+$	M1 RYC	M2 RYC	T RYC	S RYC
001	$\overline{T}M\overline{C}$	001	001	001	100	100
001	TM \overline{C}	010				
	$\overline{T}\overline{Y}$	010	001	010	100	100
010	T \overline{Y}	011				
011	$\overline{T}T\overline{C}$	011	001	100	001	100
	TT \overline{C}	100				
100	$\overline{T}\overline{Y}$	100	010	100	010	100
	T \overline{Y}	101				
101	$\overline{T}S\overline{C}$	101	100	100	100	001
	TS \overline{C}	110				
110	$\overline{T}\overline{Y}$	110	100	100	100	010
	T \overline{Y}	001				
111	-	000	000	000	000	000