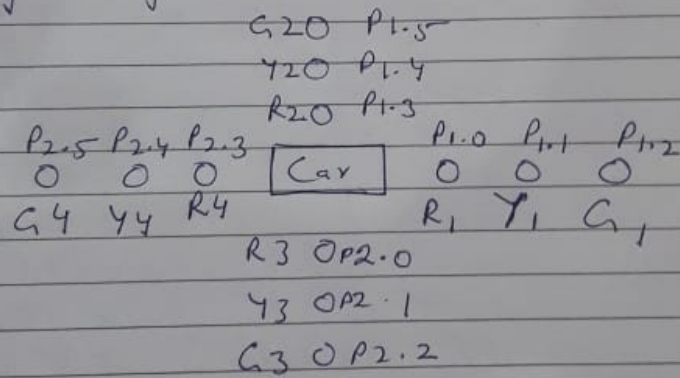


Practical 7

Aim: Program to generate Traffic Signal using 8051 MC

Logic diagram:-



```
#include <reg51.h>
```

```
sbit R1=P1^0;
```

```
sbit Y1=P1^1;
```

```
sbit G1=P1^2;
```

```
sbit R2=P1^3;
```

```
sbit Y2=P1^4;
```

```
sbit G2=P1^5;
```

```
sbit R3=P2^0;
```

```
sbit Y3=P2^1;
```

```
sbit G3=P2^2;
```

```
sbit R4=P2^3;
```

```
sbit Y4=P2^4;
```

```
sbit G4=P2^5;
```

```
void delay(unsigned int t)
```

```
{
```

```
        int i,j;

        for(i=0;i<=t;i++)

        for(j=0;j<=1275;j++);

    }

void clear()

{

    R1=0;

    R2=0;

    R3=0;

    R4=0;

    Y1=0;

    Y2=0;

    Y3=0;

    Y4=0;

    G1=0;

    G2=0;

    G3=0;

    G4=0;

    delay(25);

}

void phase()

{

    Y1=1;

    R2=1;

    R3=1;

    R4=1;

    delay(25);
```

```
G1=1;

R2=1;

R3=1;

R4=1;

delay(25);

Y2=1;

R1=1;

R3=1;

R4=1;

delay(25);

G2=1;

R1=1;

R3=1;

R4=1;

delay(25);

Y3=1;

R1=1;

R2=1;

R4=1;

delay(25);

G3=1;

R1=1;

R2=1;

R4=1;

delay(25);

Y4=1;

R1=1;
```

```
        R2=1;

        R3=1;

        delay(25);

        G4=1;

        R1=1;

        R2=1;

        R3=1;

        delay(25);
    }

void main(void)
{
    P1=0X00;

    P2=0X00;

    while(1)
    {
        phase();

        clear();

    }
}
```