```
#include <LiquidCrystal.h>
LiquidCrystal lcd(2, 3, 4, 5, 6, 7);


const int S1E=A8;   ///////////////L1
const int S2E=A9;   ///////////////L2
const int S3E=A10;   ///////////////L3
const int S4E=A11;   ///////////////L4

int S11E=0;
int S12E=0;
int S13E=0;
int S14E=0;

int S1Ealert=1;
int S2Ealert=1;
int S3Ealert=1;
int S4Ealert=1;

const int L1G=16;   ///////////////L1-GREEN
const int L1O=15;   ///////////////L1-ORANGE
const int L1R=14;   ///////////////L1-RED

const int L2G=17;   ///////////////L2-GREEN
const int L2O=18;   ///////////////L2-ORANGE
const int L2R=19;   ///////////////L2-RED

const int L3G=8;   ///////////////L3-GREEN
const int L3O=9;   ///////////////L3-ORANGE
const int L3R=10;   ///////////////L3-RED

const int L4G=11;   ///////////////L4-GREEN
const int L4O=12;   ///////////////L4-ORANGE
const int L4R=13;   ///////////////L4-RED

int aa=0;
void setup()
{
lcd.begin(16, 2);

pinMode(S1E, INPUT);
pinMode(S2E, INPUT);
pinMode(S3E, INPUT);
pinMode(S4E, INPUT);

pinMode(L1G, OUTPUT);
pinMode(L1O, OUTPUT);
pinMode(L1R, OUTPUT);

pinMode(L2G, OUTPUT);
pinMode(L2O, OUTPUT);
pinMode(L2R, OUTPUT);
```

```
pinMode(L3G, OUTPUT);
pinMode(L3O, OUTPUT);
pinMode(L3R, OUTPUT);

pinMode(L4G, OUTPUT);
pinMode(L4O, OUTPUT);
pinMode(L4R, OUTPUT);

lcd.clear();
lcd.setCursor(0,0);
lcd.print("TRAFFIC LIGHT ");
lcd.setCursor(0,1);
lcd.print(" CONTROL DURING");

digitalWrite(L1G, LOW);digitalWrite(L1O, LOW);digitalWrite(L1R,
LOW);delay(1000);
digitalWrite(L1G, HIGH);digitalWrite(L1O, HIGH);digitalWrite(L1R,
HIGH);delay(1000);

digitalWrite(L2G, LOW);digitalWrite(L2O, LOW);digitalWrite(L2R,
LOW);delay(1000);
digitalWrite(L2G, HIGH);digitalWrite(L2O, HIGH);digitalWrite(L2R,
HIGH);delay(1000);

digitalWrite(L3G, LOW);digitalWrite(L3O, LOW);digitalWrite(L3R,
LOW);delay(1000);
digitalWrite(L3G, HIGH);digitalWrite(L3O, HIGH);digitalWrite(L3R,
HIGH);delay(1000);

digitalWrite(L4G, LOW);digitalWrite(L4O, LOW);digitalWrite(L4R,
LOW);delay(1000);
digitalWrite(L4G, HIGH);digitalWrite(L4O, HIGH);digitalWrite(L4R,
HIGH);delay(1000);

lcd.clear();
lcd.setCursor(0,0);
lcd.print("EMERGENCY");
lcd.setCursor(0,1);
lcd.print(" VEHICLE PASSING");
delay(3000);
lcd.clear();
digitalWrite(L1G, HIGH);digitalWrite(L1O, HIGH);digitalWrite(L1R,
HIGH);delay(100);
digitalWrite(L2G, HIGH);digitalWrite(L2O, HIGH);digitalWrite(L2R,
HIGH);delay(100);
digitalWrite(L3G, HIGH);digitalWrite(L3O, HIGH);digitalWrite(L3R,
HIGH);delay(100);
digitalWrite(L4G, HIGH);digitalWrite(L4O, HIGH);digitalWrite(L4R,
HIGH);delay(100);

}
```

```
void loop()
{
 if(aa==0)
 {
//////////////////////////////////////// FIRST
LANE////////////////////////////////////////////////////
digitalWrite(L1R, HIGH);digitalWrite(L1G, LOW);digitalWrite(L2R,
LOW);digitalWrite(L3R, LOW);digitalWrite(L4R, LOW);delay(1000);
digitalWrite(L1G, HIGH);digitalWrite(L1O,
LOW);delay(500);digitalWrite(L1O, HIGH);digitalWrite(L1R, LOW);
//////////////////////////////////////// second
LANE////////////////////////////////////////////////////
digitalWrite(L2R, HIGH);digitalWrite(L2G, LOW);digitalWrite(L1R,
LOW);digitalWrite(L3R, LOW);digitalWrite(L4R, LOW);delay(1000);
digitalWrite(L2G, HIGH);digitalWrite(L2O,
LOW);delay(500);digitalWrite(L2O, HIGH);digitalWrite(L2R, LOW);
//////////////////////////////////////// third
LANE////////////////////////////////////////////////////
digitalWrite(L3R, HIGH);digitalWrite(L3G, LOW);digitalWrite(L2R,
LOW);digitalWrite(L1R, LOW);digitalWrite(L4R, LOW);delay(1000);
digitalWrite(L3G, HIGH);digitalWrite(L3O,
LOW);delay(500);digitalWrite(L3O, HIGH);digitalWrite(L3R, LOW);
//////////////////////////////////////// Fourth
LANE////////////////////////////////////////////////////
digitalWrite(L4R, HIGH);digitalWrite(L4G, LOW);digitalWrite(L2R,
LOW);digitalWrite(L3R, LOW);digitalWrite(L1R, LOW);delay(1000);
digitalWrite(L4G, HIGH);digitalWrite(L4O,
LOW);delay(500);digitalWrite(L4O, HIGH);digitalWrite(L4R, LOW);
}
//////////////////////////////////////// cheking
ambulance//////////////////////////////////////////////////////

S1Ealert = digitalRead(S1E);if (S1Ealert == LOW){S11E=0;}else{S11E=1;}
S2Ealert = digitalRead(S2E);if (S2Ealert == LOW){S12E=0;}else{S12E=1;}
S3Ealert = digitalRead(S3E);if (S3Ealert == LOW){S13E=0;}else{S13E=1;}
S4Ealert = digitalRead(S4E);if (S4Ealert == LOW){S14E=0;}else{S14E=1;}

//////////////////////////////////////NORMAL NO
AMBULANCE//////////////////////////////////////////////////////////
////////////////////
if((S11E==1) & (S12E==1)  & (S13E==1) & (S14E==1))
{lcd.setCursor(0,0);lcd.print("NORMAL        ");aa=0;}
//////////////////////////////////////AMBULANCE COMING AT FIRST
LANE////////////////////////////////////////////////////
if((S11E==0) & (S12E==1)  & (S13E==1) & (S14E==1))
{aa=1;
lcd.setCursor(0,0);lcd.print("FIRST LANE    ");
digitalWrite(L1R, HIGH);digitalWrite(L1G, LOW);digitalWrite(L2R,
LOW);digitalWrite(L3R, LOW);digitalWrite(L4R, LOW);
delay(1000);digitalWrite(L1G, HIGH);
}
```

```
//////////////////////////////////////AMBULANCE COMING AT SECOND
LANE////////////////////////////////////////////////////////////////
////
if((S11E==1) & (S12E==0)  & (S13E==1) & (S14E==1))
{aa=1;
lcd.setCursor(0,0);lcd.print("SECOND LANE    ");
digitalWrite(L2R, HIGH);digitalWrite(L2G, LOW);digitalWrite(L1R,
LOW);digitalWrite(L3R, LOW);digitalWrite(L4R, LOW);
delay(1000);digitalWrite(L2G, HIGH);
}
//////////////////////////////////////AMBULANCE COMING AT THIRD
LANE////////////////////////////////////////////////////////////////
if((S11E==1) & (S12E==1)  & (S13E==0) & (S14E==1))
{aa=1;
lcd.setCursor(0,0);lcd.print("THIRD LANE     ");
digitalWrite(L3R, HIGH);digitalWrite(L3G, LOW);digitalWrite(L2R,
LOW);digitalWrite(L1R, LOW);digitalWrite(L4R, LOW);
delay(1000);digitalWrite(L3G, HIGH);
}
//////////////////////////////////////AMBULANCE COMING AT FOURTH
LANE////////////////////////////////////////////////////////////////
if((S11E==1) & (S12E==1)  & (S13E==1) & (S14E==0))
{aa=1;
lcd.setCursor(0,0);lcd.print("FOURTH LANE    ");
digitalWrite(L4R, HIGH);digitalWrite(L4G, LOW);digitalWrite(L2R,
LOW);digitalWrite(L3R, LOW);digitalWrite(L1R, LOW);
delay(1000);digitalWrite(L4G, HIGH);
}
//////////////////////////////////////AMBULANCE COMING AT 2 - 3
LINE
LANE////////////////////////////////////////////////////////////////
if((S11E==1) & (S12E==0)  & (S13E==0) & (S14E==1))
{aa=1;
lcd.setCursor(0,0);lcd.print("2-3 LANE    ");
digitalWrite(L2R, HIGH);digitalWrite(L2G, LOW);digitalWrite(L4R, LOW);
digitalWrite(L3R, HIGH);digitalWrite(L3G, LOW);digitalWrite(L1R, LOW);
delay(1000);digitalWrite(L2G, HIGH);digitalWrite(L3G, HIGH);
}
////////////////////////////////////////////////////////////////////
////////////////////////////////////////////////////////////////////
}
```