**LED glow**

****

 **Code:**

void setup()

{

pinMode(8, OUTPUT);

}

void loop()

{

digitalWrite(8, HIGH);

delay(1000); // Wait for 1000 millisecond(s)

digitalWrite(8, LOW);

delay(1000); // Wait for 1000 millisecond(s)

}

**Traffic Signal**

****

**Code:**

void setup()

{

pinMode(2, OUTPUT);

pinMode(3, OUTPUT);

pinMode(4, OUTPUT);

}

void loop()

{

int a[3]={2,3,4};

for(int i=0;i<3;i++)

{

digitalWrite(a[i], HIGH);

delay(500); // Wait for 1000 millisecond(s)

digitalWrite(a[i], LOW);

delay(500); // Wait for 1000 millisecond(s)

}

}

**Seven Segment Display**

****

**Code**

 **Code:**

int E=13;

int D=12;

int C=11;

int DP=10;

int B=9;

int A=8;

int F=7;

int G=6;

void zero()

{

digitalWrite(E, LOW);

digitalWrite(D, LOW);

digitalWrite(C, LOW);

digitalWrite(DP, HIGH);

digitalWrite(B,LOW);

digitalWrite(A, LOW);

digitalWrite(F, LOW);

digitalWrite(G, HIGH);

}

void one()

{

digitalWrite(E, HIGH);

digitalWrite(D, HIGH);

digitalWrite(C, LOW);

digitalWrite(DP, HIGH);

digitalWrite(B,HIGH);

digitalWrite(A, LOW);

digitalWrite(F, HIGH);

digitalWrite(G, HIGH);

}

void two()

{

digitalWrite(E, LOW);

digitalWrite(D, LOW);

digitalWrite(C, HIGH);

digitalWrite(DP, HIGH);

digitalWrite(B,LOW);

digitalWrite(A, LOW);

digitalWrite(F, HIGH);

digitalWrite(G, LOW);

}

void three()

{

digitalWrite(E, HIGH);

digitalWrite(D, LOW);

digitalWrite(C, LOW);

digitalWrite(DP, HIGH);

digitalWrite(B,LOW);

digitalWrite(A, LOW);

digitalWrite(F, HIGH);

digitalWrite(G, LOW);

}

void four()

{

digitalWrite(E, HIGH);

digitalWrite(D, HIGH);

digitalWrite(C, LOW);

digitalWrite(DP, HIGH);

digitalWrite(B,HIGH);

digitalWrite(A, LOW);

digitalWrite(F, LOW);

digitalWrite(G, LOW);

}

void five()

{

digitalWrite(E, HIGH);

digitalWrite(D, LOW);

digitalWrite(C, LOW);

digitalWrite(DP, HIGH);

digitalWrite(B,LOW);

digitalWrite(A, HIGH);

digitalWrite(F, LOW);

digitalWrite(G, LOW);

}

void six()

{

digitalWrite(E, LOW);

digitalWrite(D, LOW);

digitalWrite(C, LOW);

digitalWrite(DP, HIGH);

digitalWrite(B,LOW);

digitalWrite(A, HIGH);

digitalWrite(F, LOW);

digitalWrite(G, LOW);

}

void seven()

{

digitalWrite(E, HIGH);

digitalWrite(D, HIGH);

digitalWrite(C, LOW);

digitalWrite(DP, HIGH);

digitalWrite(B,LOW);

digitalWrite(A, LOW);

digitalWrite(F, HIGH);

digitalWrite(G, HIGH);

}

void eight()

{

digitalWrite(E, LOW);

digitalWrite(D, LOW);

digitalWrite(C, LOW);

digitalWrite(DP, HIGH);

digitalWrite(B,LOW);

digitalWrite(A, LOW);

digitalWrite(F, LOW);

digitalWrite(G, LOW);

}

void nine()

{

digitalWrite(E, HIGH);

digitalWrite(D, LOW);

digitalWrite(C, LOW);

digitalWrite(DP, HIGH);

digitalWrite(B,LOW);

digitalWrite(A, LOW);

digitalWrite(F, LOW);

digitalWrite(G, LOW);

}

void setup()

{

pinMode(E, OUTPUT);

pinMode(D, OUTPUT);

pinMode(C, OUTPUT);

pinMode(DP, OUTPUT);

pinMode(B, OUTPUT);

pinMode(A, OUTPUT);

pinMode(F, OUTPUT);

pinMode(G, OUTPUT);

}

void loop()

{

zero();

delay(1000);

one();

delay(1000);

two();

delay(1000);

three();

delay(1000);

four();

delay(1000);

five();

delay(1000);

six();

delay(1000);

seven();

delay(1000);

eight();

delay(1000);

nine();

delay(1000);

}

 **DC Motor Driver using NMOS:**



**Code:**

void setup() {

pinMode(3, OUTPUT);

}

void loop()

{

for (int i = 0; i < 250; i++) {

analogWrite(3, i);

delay(10); }

for (int i = 255; i > 5; i--)

{ analogWrite(3, i);

delay(10); }

}