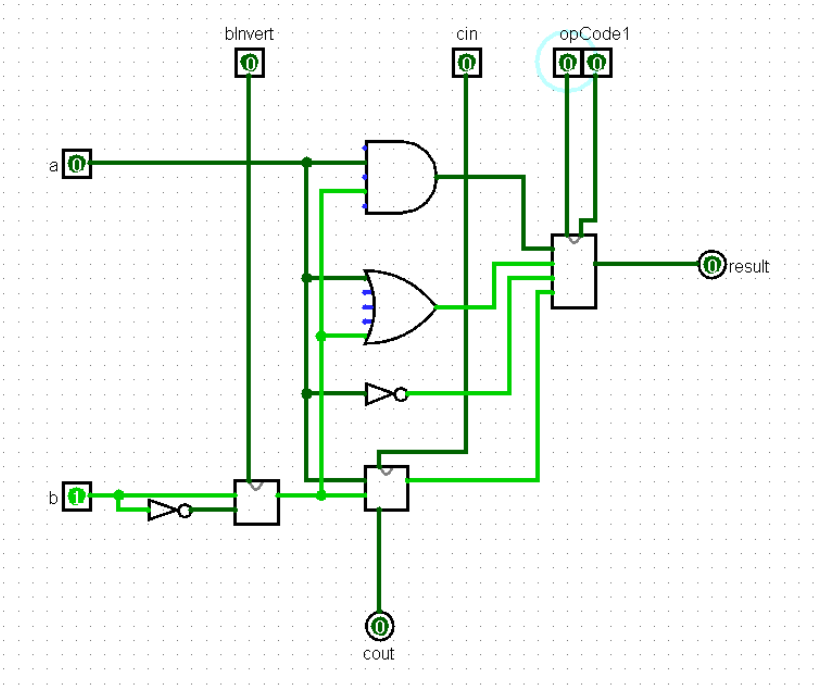
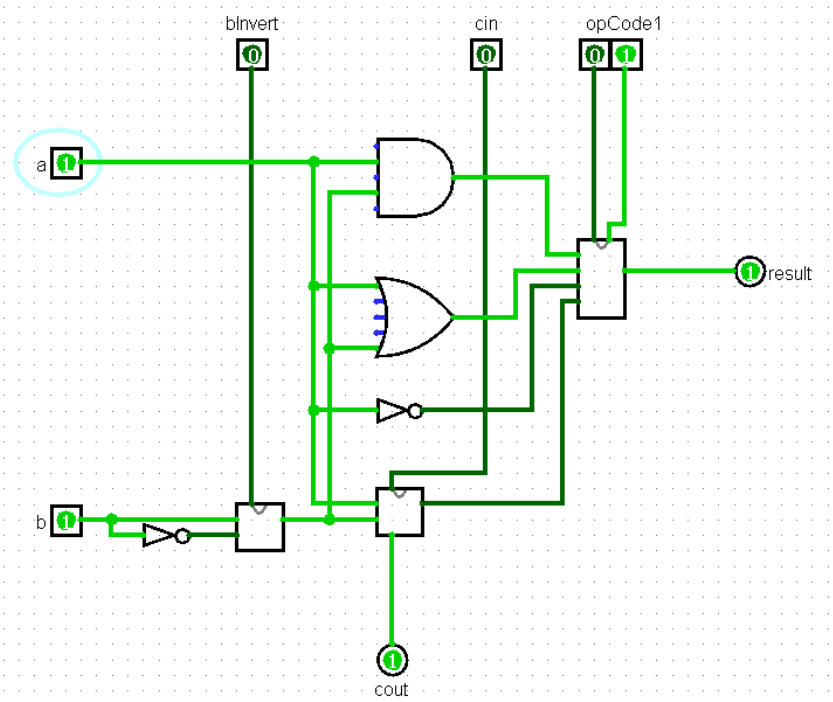
EP02

Testes ULA 1 Bit:

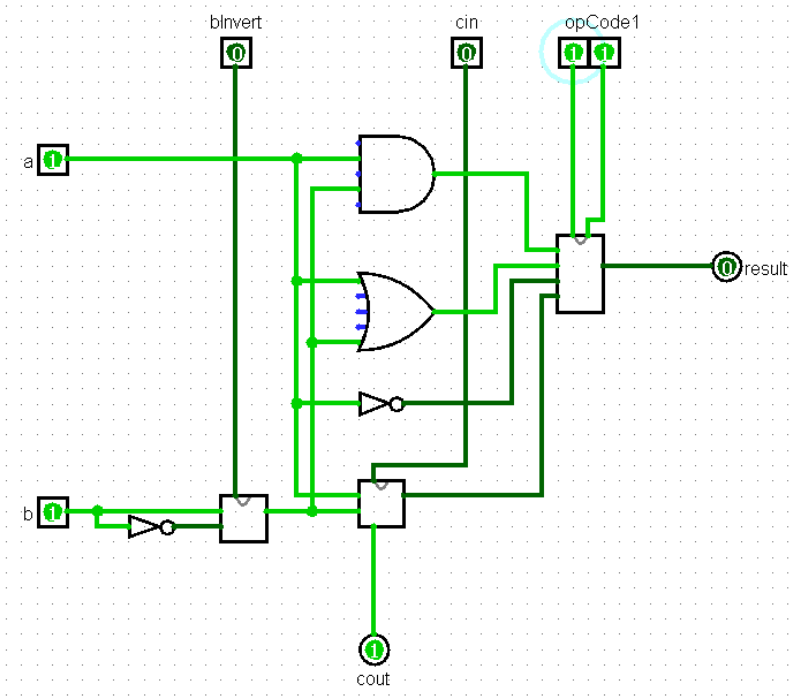
AND(0,1);



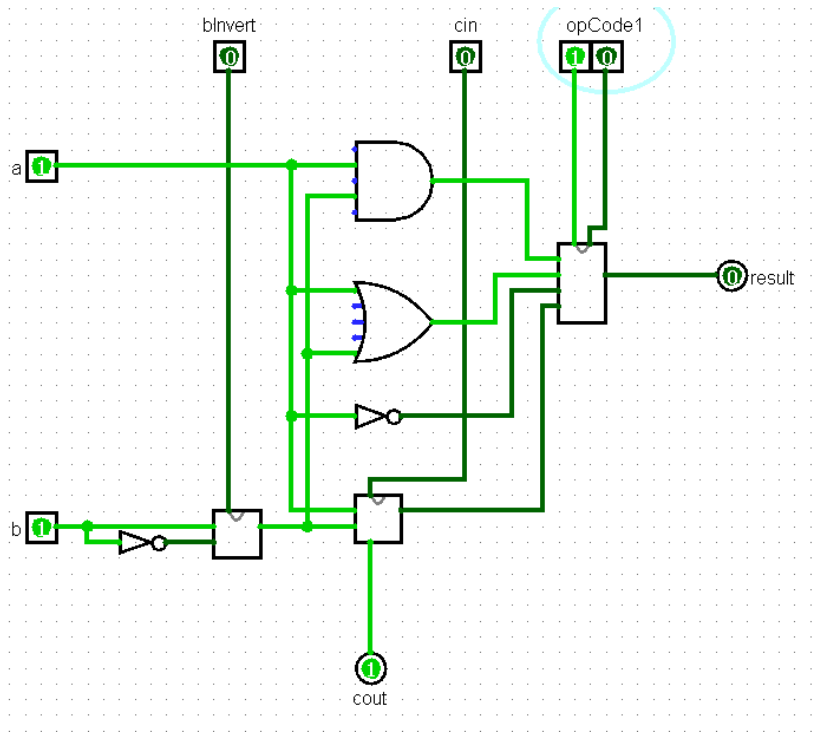
OR(1,1);


bInvert
cin
opCode1
a
result
b
cout

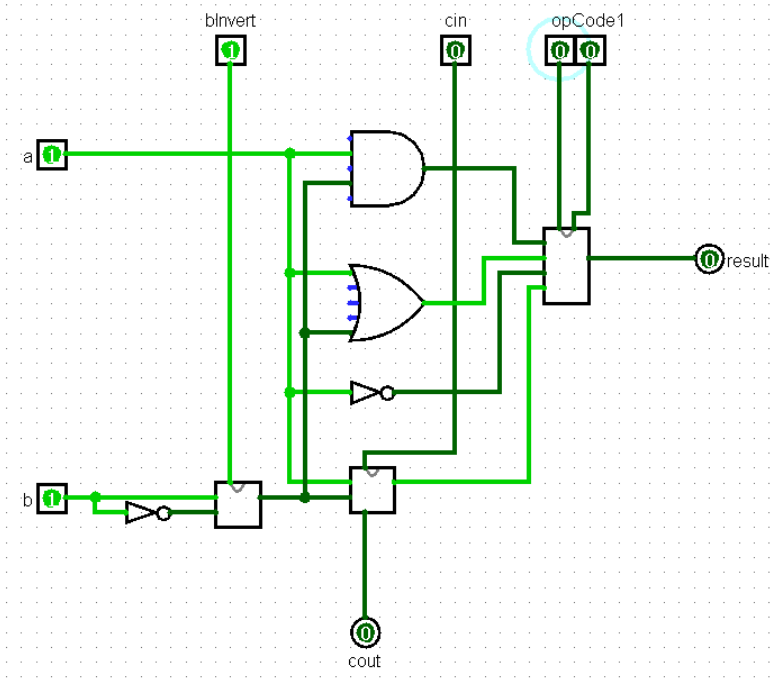
SOMA(1,1);


bInvert
cin
opCode1
a
result
b
cout

NOT(1);

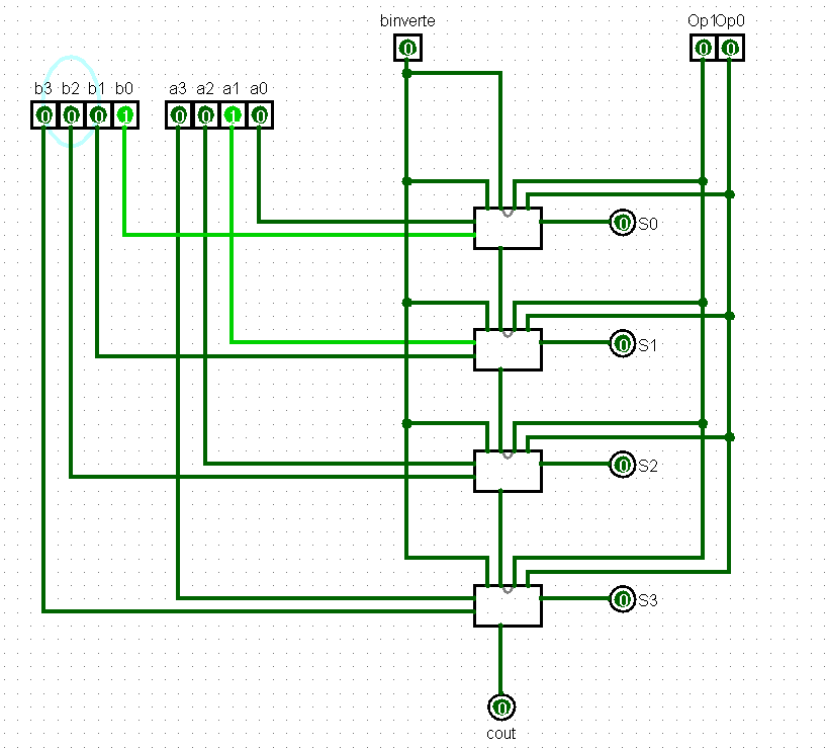

bInvert
cin
opCode1
a
b
result
cout

SOMA(1,-1);

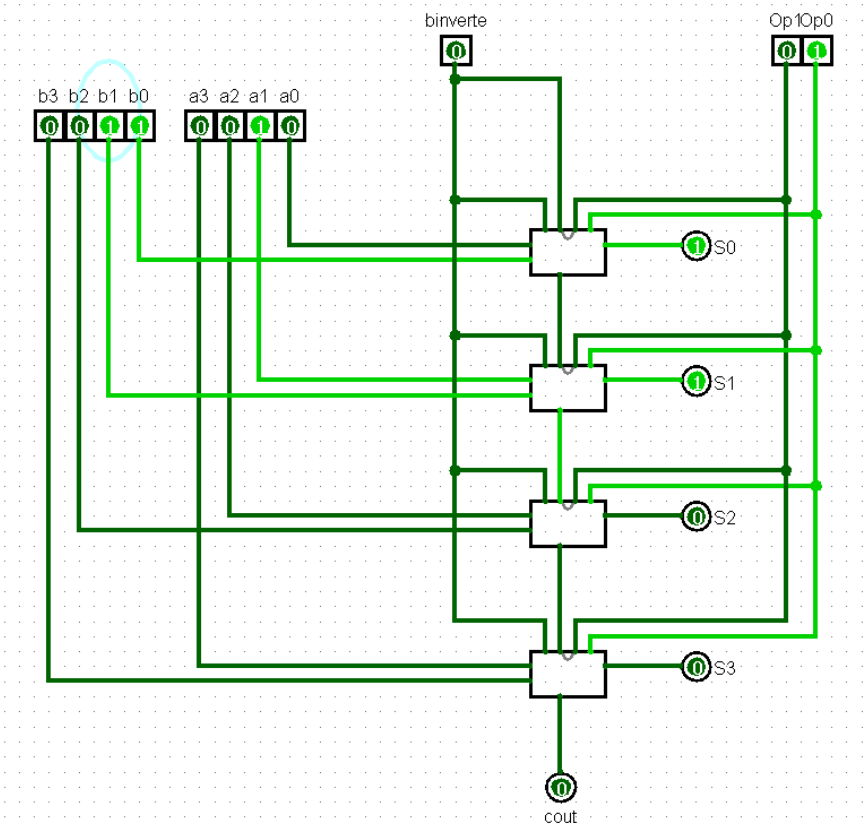

bInvert
cin
opCode1
a
b
result
cout

Testes ULA 4 Bit

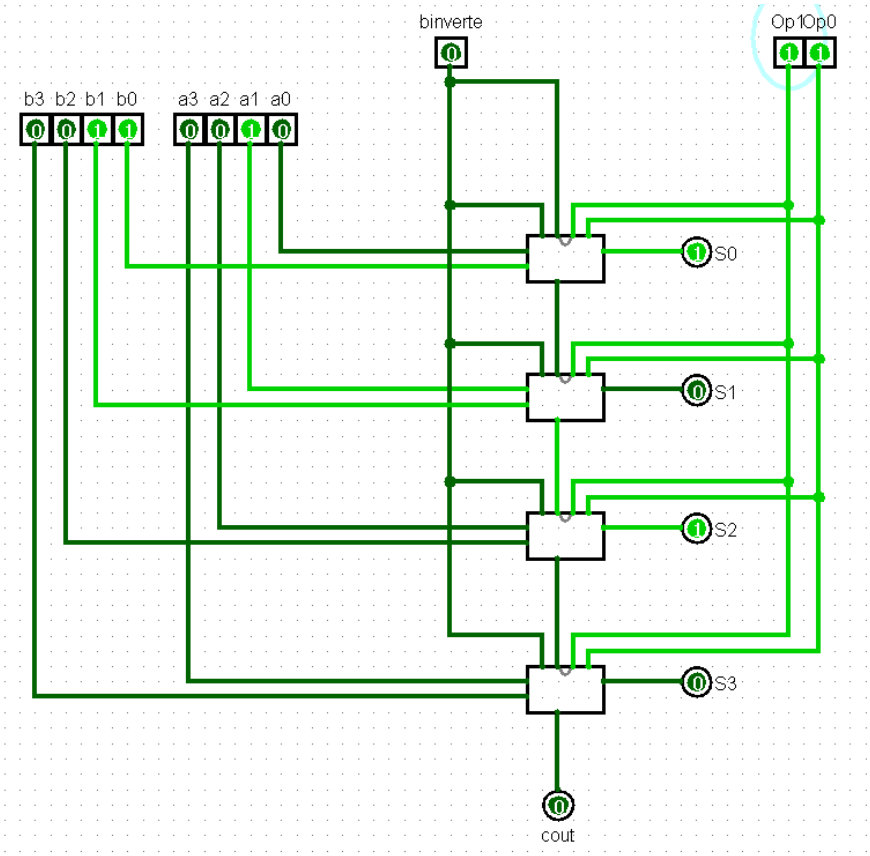
AND(2,1)



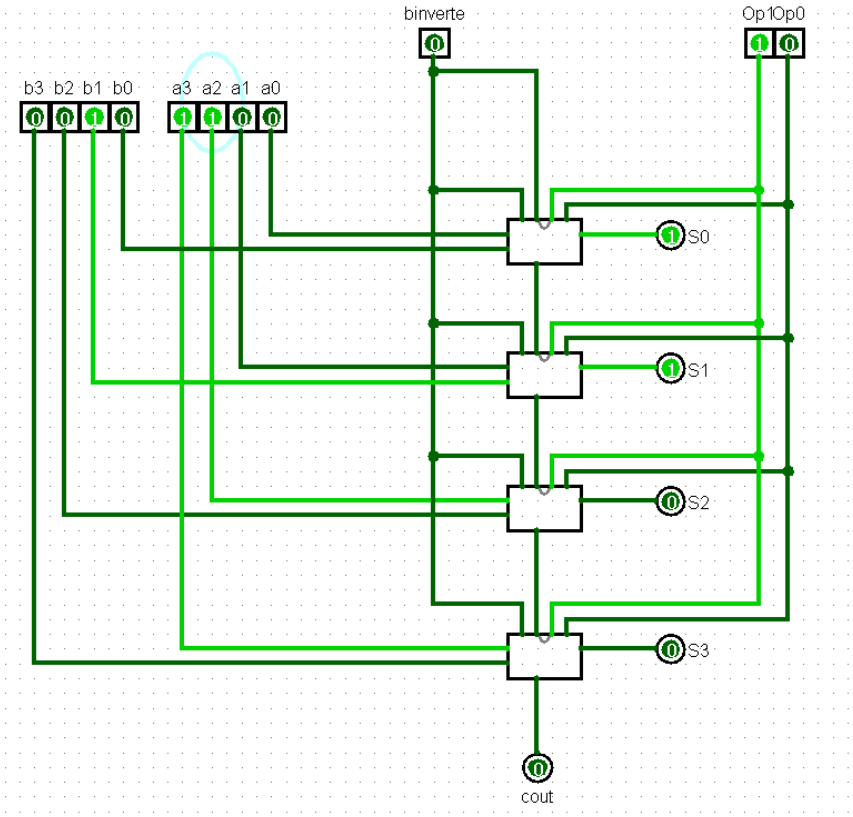
OR(2,3)



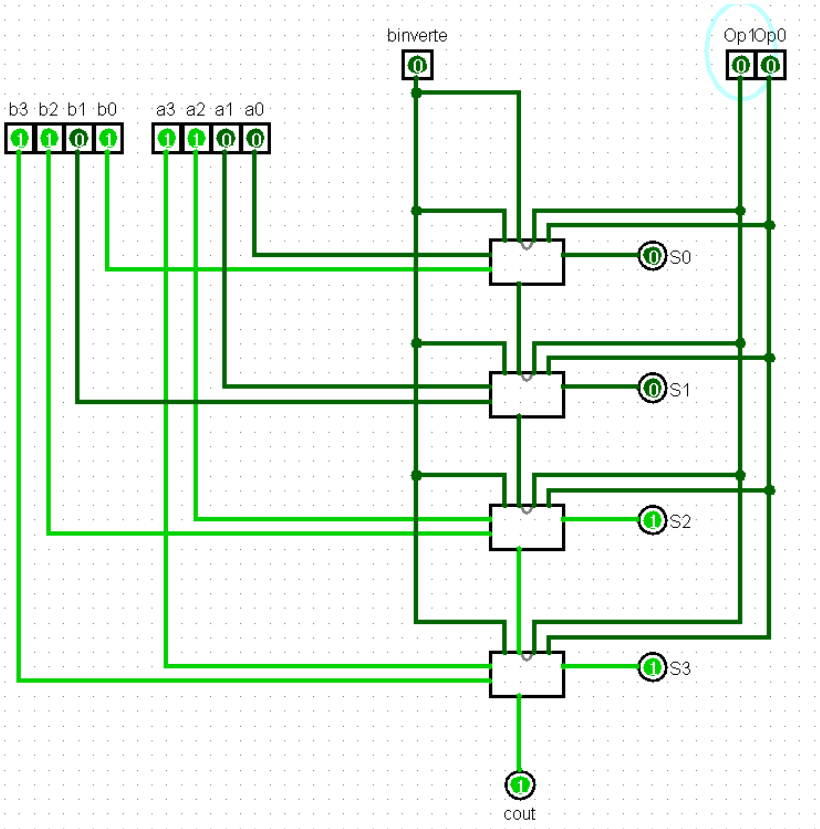
SOMA(2,3)



NOT(12,3)



AND(12,13)



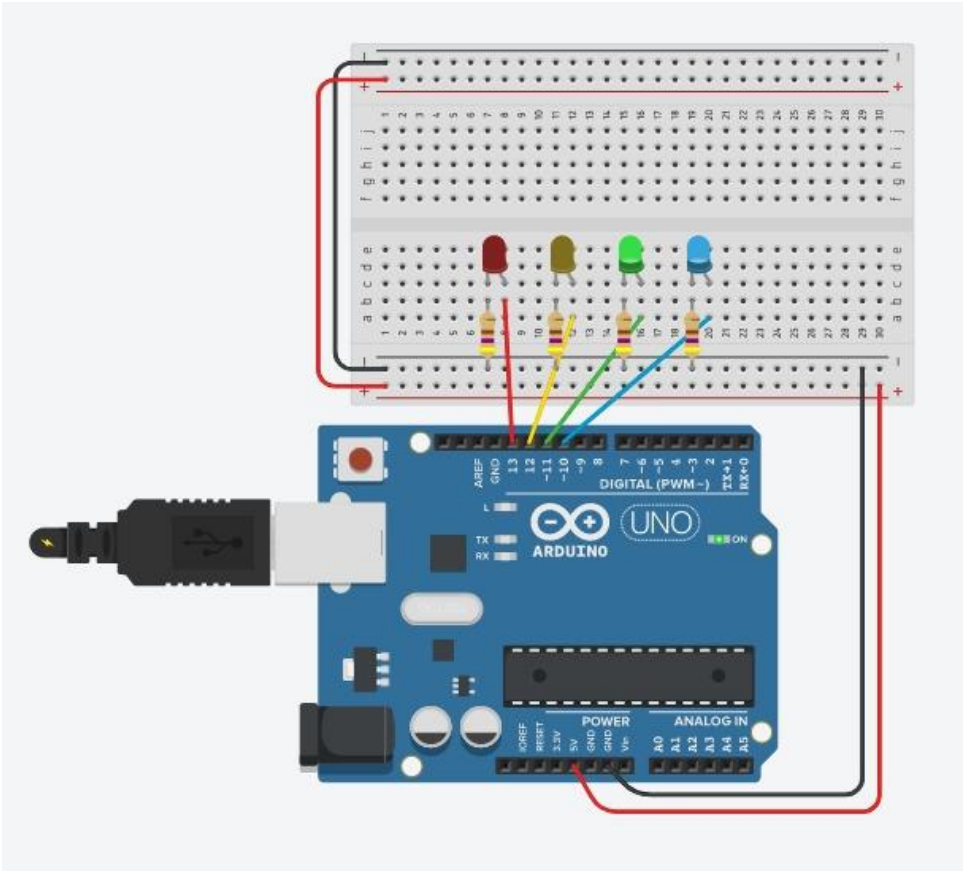
Preenchendo a tabela

Intrução realizada	**Binário**	**Hexa**	**Resultado(Binario)**
AND(A,B)	0010 0001 00	0X084	0000
OR(A,B)	0010 0011 01	0x08D	0011
SOMA(A,B)	0010 0011 11	0x08F	0101
NOT(A)	1100 0011 01	0x30D	0011
AND(A,B)	1100 1101 00	0x334	11100

LEDs ARDUINO

Ex1 - Semáforo

```
/*
  Programa 01
  Semáforo
 */

// Definiçao de valores para variáveis
int led10 = 10;
int led11 = 11;
int led12 = 12;
int led13 = 13;


// Rotina executada 1 vez e que em geral configura entradas e saídas
void setup() {
  // configura os pinos como saídas DIGITAIS.
  pinMode(led10, OUTPUT);
  pinMode(led11, OUTPUT);
  pinMode(led12, OUTPUT);
  pinMode(led13, OUTPUT);

}

// the loop routine runs over and over again forever:
void loop() {
  digitalWrite(led10, HIGH);
  digitalWrite(led13, HIGH);
  delay(1000);
  digitalWrite(led10, LOW);
  delay(1000);
  digitalWrite(led10, HIGH);
  delay(1000);
  digitalWrite(led10, LOW);
  delay(1000);
  digitalWrite(led10, HIGH);
  delay(1000);
  digitalWrite(led10, LOW);
  delay(1000);
  digitalWrite(led13, LOW);


  digitalWrite(led10, HIGH);
  digitalWrite(led11, HIGH);
  delay(1000);
  digitalWrite(led10, LOW);
  delay(1000);
  digitalWrite(led10, HIGH);
  delay(1000);
  digitalWrite(led10, LOW);
  delay(1000);
  digitalWrite(led10, HIGH);
  delay(1000);
  digitalWrite(led10, LOW);
  delay(1000);
  digitalWrite(led10, HIGH);
  delay(1000);
  digitalWrite(led10, LOW);
  digitalWrite(led11, LOW);
  delay(1000);

  digitalWrite(led10, HIGH);
  digitalWrite(led12, HIGH);
  delay(1000);
  digitalWrite(led10, LOW);
  delay(1000);
  digitalWrite(led10, HIGH);
  delay(1000);
  digitalWrite(led10, LOW);
  digitalWrite(led12, LOW);
  delay(1000);

}
```


DIGITAL (PWM~)
UNO
ARDUINO
POWER
ANALOG IN