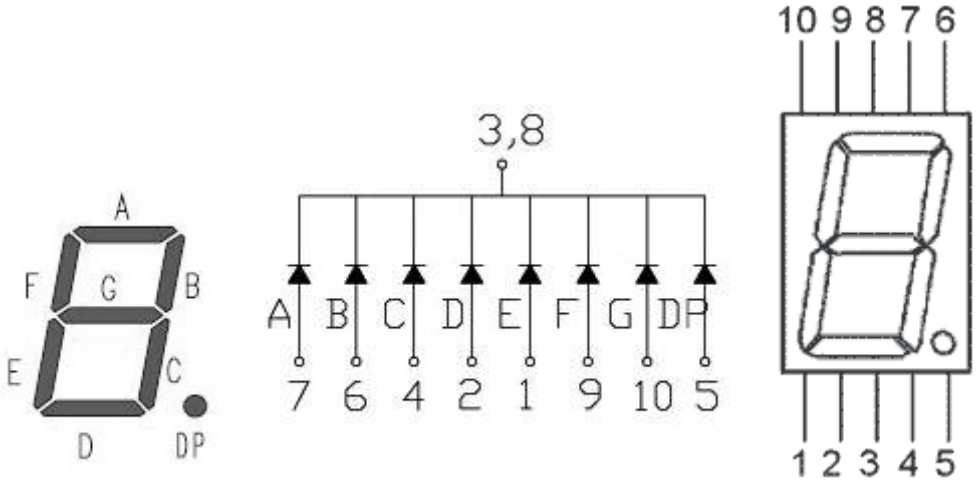
Κοινής καθόδου

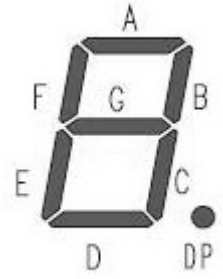


Arduino Pin	7 Segment Pin Connection
2	7 (A)
3	6 (B)
4	4 (C)
5	2 (D)
6	1 (E)
7	9 (F)
8	10 (G)
9	5 (DP)

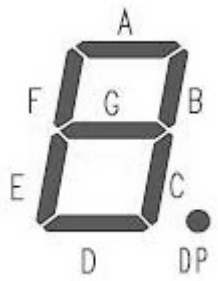
```
// www.TheElectronicsHobbyist.com/blog
// Natalia Fargasch Norman
// Seven-segment LED Display
// Common Anode pins 3 and 8

//   G F + A B
//   | | | | |   -> pins and segments they control
//   ---------
//  F|   A   |B
//   |---G---|   -> segments
//  E|   D   |C
//   ---------
//   | | | | |   -> pins and segments they control
//   E D + C DP

// Segments that make each number when lit:
// 0 => ABCDEF
// 1 => BC
// 2 => ABDEG
// 3 => ABCDG
// 4 => BCFG
// 5 => ACDFG
```

```
// 6 => ACDEFG
// 7 => ABC
// 8 => ABCDEFG
// 9 => ABCDFG

// Arduino digital pins used to light up
// corresponding segments on the LED display
#define A 2
#define B 3
#define C 4
#define D 5
#define E 6
#define F 7
#define G 8

// Pushbutton connected to pin 9
#define BUTTON 9

// Common anode;
// on when pin is low
// and off when pin is high
#define ON LOW
#define OFF HIGH

int count = 0; // current display count
int val = 0;   // digital input from button

void setup() {
  pinMode(A, OUTPUT);
  pinMode(B, OUTPUT);
  pinMode(C, OUTPUT);
  pinMode(D, OUTPUT);
  pinMode(E, OUTPUT);
  pinMode(F, OUTPUT);
  pinMode(G, OUTPUT);
  pinMode(BUTTON, INPUT);
  zero();
}

void loop() {
  val = digitalRead(BUTTON);
  if (val == HIGH) {
    count++;
    delay(200);
    switch (count) {
      case 0:
        zero();
        break;
      case 1:
        one();
        break;
      case 2:
        two();
        break;
      case 3:
        three();
        break;
      case 4:
        four();
        break;
      case 5:
```

```
        five();
        break;
      case 6:
        six();
        break;
      case 7:
        seven();
        break;
      case 8:
        eight();
        break;
      case 9: {
        nine();
        count = -1;
        break;
      }
    }
  }
}

// 0 => ABCDEF
void zero() {
  digitalWrite(A, ON);
  digitalWrite(B, ON);
  digitalWrite(C, ON);
  digitalWrite(D, ON);
  digitalWrite(E, ON);
  digitalWrite(F, ON);
  digitalWrite(G, OFF);
}

// 1 => BC
void one() {
  digitalWrite(A, OFF);
  digitalWrite(B, ON);
  digitalWrite(C, ON);
  digitalWrite(D, OFF);
  digitalWrite(E, OFF);
  digitalWrite(F, OFF);
  digitalWrite(G, OFF);
}

// 2 => ABDEG
void two() {
  digitalWrite(A, ON);
  digitalWrite(B, ON);
  digitalWrite(C, OFF);
  digitalWrite(D, ON);
  digitalWrite(E, ON);
  digitalWrite(F, OFF);
  digitalWrite(G, ON);
}

// 3 => ABCDG
void three() {
  digitalWrite(A, ON);
  digitalWrite(B, ON);
  digitalWrite(C, ON);
  digitalWrite(D, ON);
  digitalWrite(E, OFF);
  digitalWrite(F, OFF);
```



```
  digitalWrite(G, ON);
}

// 4 => BCFG
void four() {
  digitalWrite(A, OFF);
  digitalWrite(B, ON);
  digitalWrite(C, ON);
  digitalWrite(D, OFF);
  digitalWrite(E, OFF);
  digitalWrite(F, ON);
  digitalWrite(G, ON);
}

// 5 => ACDFG
void five() {
  digitalWrite(A, ON);
  digitalWrite(B, OFF);
  digitalWrite(C, ON);
  digitalWrite(D, ON);
  digitalWrite(E, OFF);
  digitalWrite(F, ON);
  digitalWrite(G, ON);
}

// 6 => ACDEFG
void six() {
  digitalWrite(A, ON);
  digitalWrite(B, OFF);
  digitalWrite(C, ON);
  digitalWrite(D, ON);
  digitalWrite(E, ON);
  digitalWrite(F, ON);
  digitalWrite(G, ON);
}

// 7 => ABC
void seven() {
  digitalWrite(A, ON);
  digitalWrite(B, ON);
  digitalWrite(C, ON);
  digitalWrite(D, OFF);
  digitalWrite(E, OFF);
  digitalWrite(F, OFF);
  digitalWrite(G, OFF);
}

// 8 => ABCDEFG
void eight() {
  digitalWrite(A, ON);
  digitalWrite(B, ON);
  digitalWrite(C, ON);
  digitalWrite(D, ON);
  digitalWrite(E, ON);
  digitalWrite(F, ON);
  digitalWrite(G, ON);
}

// 9 => ABCDFG
void nine() {
  digitalWrite(A, ON);
```



```
  digitalWrite(B, ON);
  digitalWrite(C, ON);
  digitalWrite(D, ON);
  digitalWrite(E, OFF);
  digitalWrite(F, ON);
  digitalWrite(G, ON);
}
```