

Verzija koja pomoću **petlje** vrtili znamenke.
I dalje ostavljamo funkcije nula()...devet(), ali sad ih biramo u petlji.

☒ **Verzija s petljom (for) koja vrtili znamenke 1-9, pa 0 i točku**

```
/*
raspored segmenata
  A
  ---
F | | B
 | G |
  ---
E | | C
 | |
  ---
  D
*/

#define pinA 2
#define pinB 3
#define pinC 4
#define pinD 5
#define pinE 6
#define pinF 7
#define pinG 8
#define pinDP 9

void setup() {
  pinMode(pinA, OUTPUT);
  pinMode(pinB, OUTPUT);
  pinMode(pinC, OUTPUT);
  pinMode(pinD, OUTPUT);
  pinMode(pinE, OUTPUT);
  pinMode(pinF, OUTPUT);
  pinMode(pinG, OUTPUT);
  pinMode(pinDP, OUTPUT);

  clearAll();
}

void loop() {

  // 1) vrtili znamenke 1 do 9
  for (int i = 1; i <= 9; i++) {
    prikaziBroj(i);
    delay(1000);
  }

  // 2) prikaži 0
  prikaziBroj(0);
  delay(1000);

  // 3) prikaži točku
  tocka();
  delay(1000);
}
```

```

}

// -----
// Funkcija koja bira koju znamenku prikazati
void prikaziBroj(int broj) {
    switch (broj) {
        case 0: nula(); break;
        case 1: jedan(); break;
        case 2: dva(); break;
        case 3: tri(); break;
        case 4: cetiri();break;
        case 5: pet(); break;
        case 6: sest(); break;
        case 7: sedam(); break;
        case 8: osam(); break;
        case 9: devet(); break;
        default: clearAll(); break;
    }
}

// -----
void clearAll() {
    digitalWrite(pinA, LOW);
    digitalWrite(pinB, LOW);
    digitalWrite(pinC, LOW);
    digitalWrite(pinD, LOW);
    digitalWrite(pinE, LOW);
    digitalWrite(pinF, LOW);
    digitalWrite(pinG, LOW);
    digitalWrite(pinDP, LOW);
}

// -----
// ZNAMENKE

void jedan(){ // B, C
    digitalWrite(pinA,LOW);
    digitalWrite(pinB,HIGH);
    digitalWrite(pinC,HIGH);
    digitalWrite(pinD,LOW);
    digitalWrite(pinE,LOW);
    digitalWrite(pinF,LOW);
    digitalWrite(pinG,LOW);
    digitalWrite(pinDP,LOW);
}

void dva(){ // A, B, G, E, D
    digitalWrite(pinA,HIGH);
    digitalWrite(pinB,HIGH);
    digitalWrite(pinC,LOW);
    digitalWrite(pinD,HIGH);
    digitalWrite(pinE,HIGH);
    digitalWrite(pinF,LOW);
    digitalWrite(pinG,HIGH);

```

```
    digitalWrite(pinDP,LOW);  
}
```

```
void tri(){ // A, B, C, D, G  
    digitalWrite(pinA,HIGH);  
    digitalWrite(pinB,HIGH);  
    digitalWrite(pinC,HIGH);  
    digitalWrite(pinD,HIGH);  
    digitalWrite(pinE,LOW);  
    digitalWrite(pinF,LOW);  
    digitalWrite(pinG,HIGH);  
    digitalWrite(pinDP,LOW);  
}
```

```
void cetiri(){ // F, G, B, C  
    digitalWrite(pinA,LOW);  
    digitalWrite(pinB,HIGH);  
    digitalWrite(pinC,HIGH);  
    digitalWrite(pinD,LOW);  
    digitalWrite(pinE,LOW);  
    digitalWrite(pinF,HIGH);  
    digitalWrite(pinG,HIGH);  
    digitalWrite(pinDP,LOW);  
}
```

```
void pet(){ // A, F, G, C, D  
    digitalWrite(pinA,HIGH);  
    digitalWrite(pinB,LOW);  
    digitalWrite(pinC,HIGH);  
    digitalWrite(pinD,HIGH);  
    digitalWrite(pinE,LOW);  
    digitalWrite(pinF,HIGH);  
    digitalWrite(pinG,HIGH);  
    digitalWrite(pinDP,LOW);  
}
```

```
void sest () { // A, F, E, D, C, G  
    digitalWrite(pinA,HIGH);  
    digitalWrite(pinB,LOW);  
    digitalWrite(pinC,HIGH);  
    digitalWrite(pinD,HIGH);  
    digitalWrite(pinE,HIGH);  
    digitalWrite(pinF,HIGH);  
    digitalWrite(pinG,HIGH);  
    digitalWrite(pinDP,LOW);  
}
```

```
void sedam () { // A, B, C  
    digitalWrite(pinA,HIGH);  
    digitalWrite(pinB,HIGH);  
    digitalWrite(pinC,HIGH);  
    digitalWrite(pinD,LOW);  
    digitalWrite(pinE,LOW);  
    digitalWrite(pinF,LOW);  
}
```

```

digitalWrite(pinG,LOW);
digitalWrite(pinDP,LOW);
}

void osam () { // A, B, C, D, E, F, G
digitalWrite(pinA,HIGH);
digitalWrite(pinB,HIGH);
digitalWrite(pinC,HIGH);
digitalWrite(pinD,HIGH);
digitalWrite(pinE,HIGH);
digitalWrite(pinF,HIGH);
digitalWrite(pinG,HIGH);
digitalWrite(pinDP,LOW);
}

void devet () { // A, B, C, D, F, G
digitalWrite(pinA,HIGH);
digitalWrite(pinB,HIGH);
digitalWrite(pinC,HIGH);
digitalWrite(pinD,HIGH);
digitalWrite(pinE,LOW);
digitalWrite(pinF,HIGH);
digitalWrite(pinG,HIGH);
digitalWrite(pinDP,LOW);
}

void nula () { // A, B, C, D, E, F
digitalWrite(pinA,HIGH);
digitalWrite(pinB,HIGH);
digitalWrite(pinC,HIGH);
digitalWrite(pinD,HIGH);
digitalWrite(pinE,HIGH);
digitalWrite(pinF,HIGH);
digitalWrite(pinG,LOW);
digitalWrite(pinDP,LOW);
}

void tocka () {
digitalWrite(pinA,LOW);
digitalWrite(pinB,LOW);
digitalWrite(pinC,LOW);
digitalWrite(pinD,LOW);
digitalWrite(pinE,LOW);
digitalWrite(pinF,LOW);
digitalWrite(pinG,LOW);
digitalWrite(pinDP,HIGH);
}

```

Što je ovdje “bolje” i zašto je didaktički dobro?

- for (int i=1; i<=9; i++) pokazuje da se brojevi mogu vrtjeti automatski
 - funkcija prikaziBroj(i) uči učenike da je dobro **odvojiti logiku od prikaza**
 - dodali smo clearAll() (korisno i za kasnije zadatke s treperenjem)
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