

7 Segment 1 29/1/19

```
// This program outputs Binary Coded Decimal
// (BCD) to a 4511 decoder to display numerals.
```

```
int bit_1 = 4;
int bit_2 = 5;
int bit_3 = 6;
int bit_4 = 7;

void setup() {
  pinMode(bit_1, OUTPUT);
  pinMode(bit_2, OUTPUT);
  pinMode(bit_3, OUTPUT);
  pinMode(bit_4, OUTPUT);
}

void ZERO() {
  digitalWrite(bit_1, LOW);
  digitalWrite(bit_2, LOW);
  digitalWrite(bit_3, LOW);
  digitalWrite(bit_4, LOW);
}

void ONE() {
  digitalWrite(bit_1, HIGH);
  digitalWrite(bit_2, LOW);
  digitalWrite(bit_3, LOW);
  digitalWrite(bit_4, LOW);
}

void TWO() {
  digitalWrite(bit_1, LOW);
  digitalWrite(bit_2, HIGH);
  digitalWrite(bit_3, LOW);
  digitalWrite(bit_4, LOW);
}

void THREE() {
  digitalWrite(bit_1, HIGH);
  digitalWrite(bit_2, HIGH);
  digitalWrite(bit_3, LOW);
  digitalWrite(bit_4, LOW);
}

void FOUR() {
  digitalWrite(bit_1, LOW);
  digitalWrite(bit_2, LOW);
  digitalWrite(bit_3, HIGH);
  digitalWrite(bit_4, LOW);
}

void FIVE() {
  digitalWrite(bit_1, HIGH);
  digitalWrite(bit_2, LOW);
  digitalWrite(bit_3, HIGH);
  digitalWrite(bit_4, LOW);
}

void SIX() {
  digitalWrite(bit_1, LOW);
  digitalWrite(bit_2, HIGH);
  digitalWrite(bit_3, HIGH);
  digitalWrite(bit_4, LOW);
}

void SEVEN() {
  digitalWrite(bit_1, HIGH);
  digitalWrite(bit_2, HIGH);
  digitalWrite(bit_3, HIGH);
  digitalWrite(bit_4, LOW);
}

void EIGHT() {
  digitalWrite(bit_1, LOW);
  digitalWrite(bit_2, LOW);
  digitalWrite(bit_3, LOW);
  digitalWrite(bit_4, HIGH);
}

void NINE() {
  digitalWrite(bit_1, HIGH);
  digitalWrite(bit_2, LOW);
  digitalWrite(bit_3, LOW);
  digitalWrite(bit_4, HIGH);
}

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);
}
```