### Mögliche Lösungen zum Arbeitsblatt

**Verändere das Programm so, dass ...**

**1) ... die Leuchtdiode schneller blinkt.**

*Je kleiner der Wert von delay, je schneller blinkt die Leuchtdiode. Beispiel:*

void setup()

{

pinMode(13, OUTPUT);

}

void loop()

{

digitalWrite(13, HIGH);

delay(100);

digitalWrite(13, LOW);

delay(100);

}

**2) ... die Leuchtdiode länger an als aus ist.**

*Der Wert von delay ist klein, wenn die Leuchtdiode an ist, und groß, wenn sie aus ist. Beispiel:*

void setup()

{

pinMode(13, OUTPUT);

}

void loop()

{

digitalWrite(13, HIGH);

delay(2000);

digitalWrite(13, LOW);

delay(500);

}

**3) ... die Leuchtdiode SOS blinkt (kurz - kurz - kurz - lang - lang - lang - kurz - kurz - kurz)**

void setup()

{

pinMode(13, OUTPUT);

}

void loop()

{

digitalWrite(13, HIGH);

delay(500);

digitalWrite(13, LOW);

delay(500);

digitalWrite(13, HIGH);

delay(500);

digitalWrite(13, LOW);

delay(500);

digitalWrite(13, HIGH);

delay(500);

digitalWrite(13, LOW);

delay(500);

digitalWrite(13, HIGH);

delay(2000);

digitalWrite(13, LOW);

delay(500);

digitalWrite(13, HIGH);

delay(2000);

digitalWrite(13, LOW);

delay(500);

digitalWrite(13, HIGH);

delay(2000);

digitalWrite(13, LOW);

delay(500);

digitalWrite(13, HIGH);

delay(500);

digitalWrite(13, LOW);

delay(500);

digitalWrite(13, HIGH);

delay(500);

digitalWrite(13, LOW);

delay(500);

digitalWrite(13, HIGH);

delay(500);

digitalWrite(13, LOW);

delay(500);

}

**4): ... es mit dem Befehl „Serial.println(„Ausgabetext“);“ den Status der Leuchtdiode („An“ oder „aus“) an passender Stelle im Programm auf dem Seriellen Monitor ausgibt**

void setup()

{

pinMode(13, OUTPUT);

Serial.begin(9600);

}

void loop()

{

digitalWrite(13, HIGH);

Serial.println("An");

delay(500);

digitalWrite(13, LOW);

Serial.println("Aus");

delay(500);

digitalWrite(13, HIGH);

Serial.println("An");

delay(500);

digitalWrite(13, LOW);

Serial.println("Aus");

delay(500);

digitalWrite(13, HIGH);

Serial.println("An");

delay(500);

digitalWrite(13, LOW);

Serial.println("Aus");

delay(500);

digitalWrite(13, HIGH);

Serial.println("An");

delay(2000);

digitalWrite(13, LOW);

Serial.println("Aus");

delay(500);

digitalWrite(13, HIGH);

Serial.println("An");

delay(2000);

digitalWrite(13, LOW);

Serial.println("Aus");

delay(500);

digitalWrite(13, HIGH);

Serial.println("An");

delay(2000);

digitalWrite(13, LOW);

Serial.println("Aus");

delay(500);

digitalWrite(13, HIGH);

Serial.println("An");

delay(500);

digitalWrite(13, LOW);

Serial.println("Aus");

delay(500);

digitalWrite(13, HIGH);

Serial.println("An");

delay(500);

digitalWrite(13, LOW);

Serial.println("Aus");

delay(500);

digitalWrite(13, HIGH);

Serial.println("An");

delay(500);

digitalWrite(13, LOW);

Serial.println("Aus");

delay(500);

}