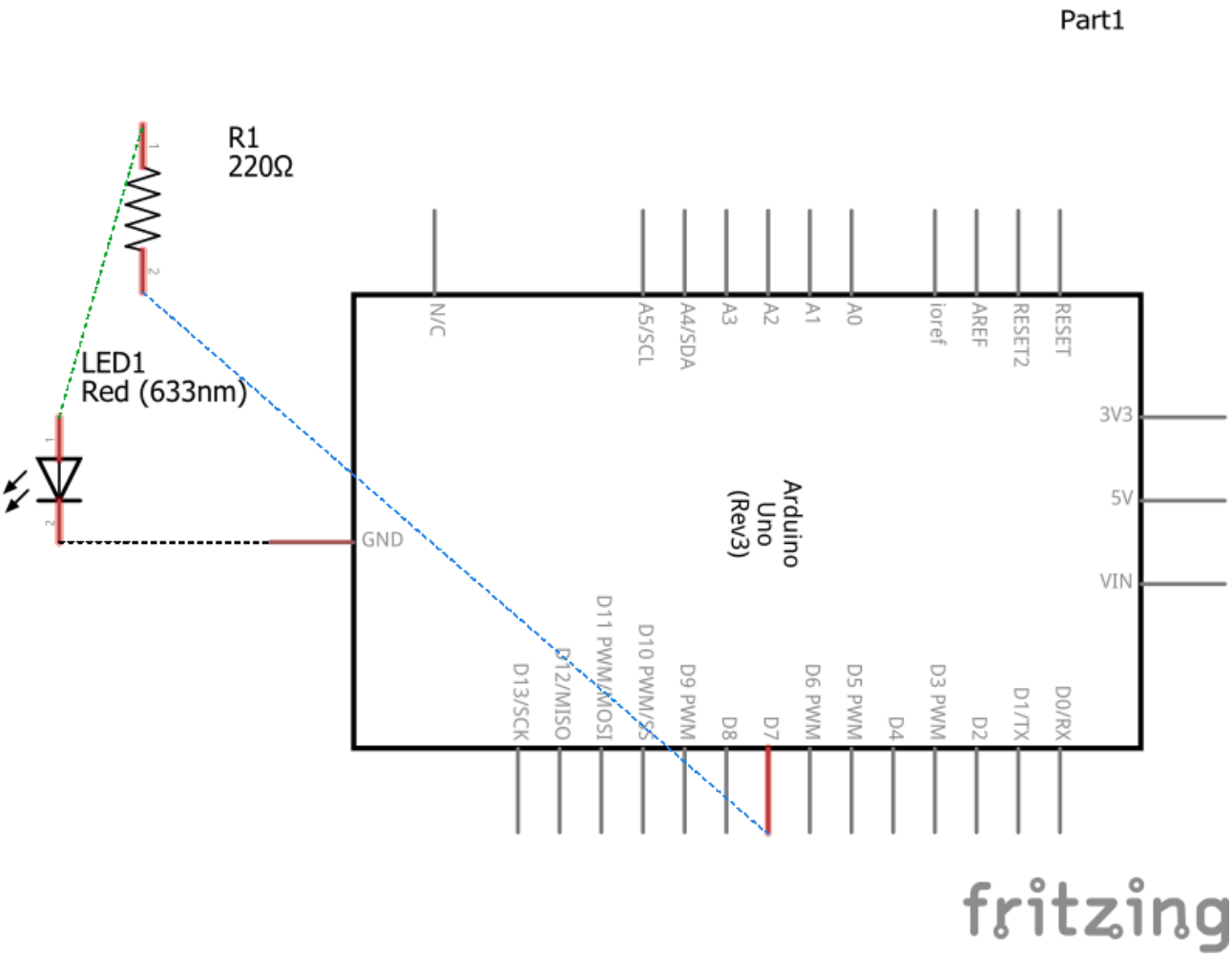
Jonne Kaajalahti

Lesson 2 raportti

Piirilevydiagrammi, A



Koodi, A

```
// the setup function runs once when you press reset or power the board
int led = 7; // led gets power from pin 7

void setup() {
  // initialize digital pin led as an output.
  pinMode(led, OUTPUT);
}

// the loop function runs over and over again forever
void loop() {
  digitalWrite(led, HIGH);   // turn the LED on (HIGH is the voltage level)
  delay(650);                // wait for 650ms
  digitalWrite(led, LOW);    // turn the LED off by making the voltage LOW
  delay(150);                // wait for 150ms
  digitalWrite(led, HIGH);   // turn the LED on (HIGH is the voltage level)
```

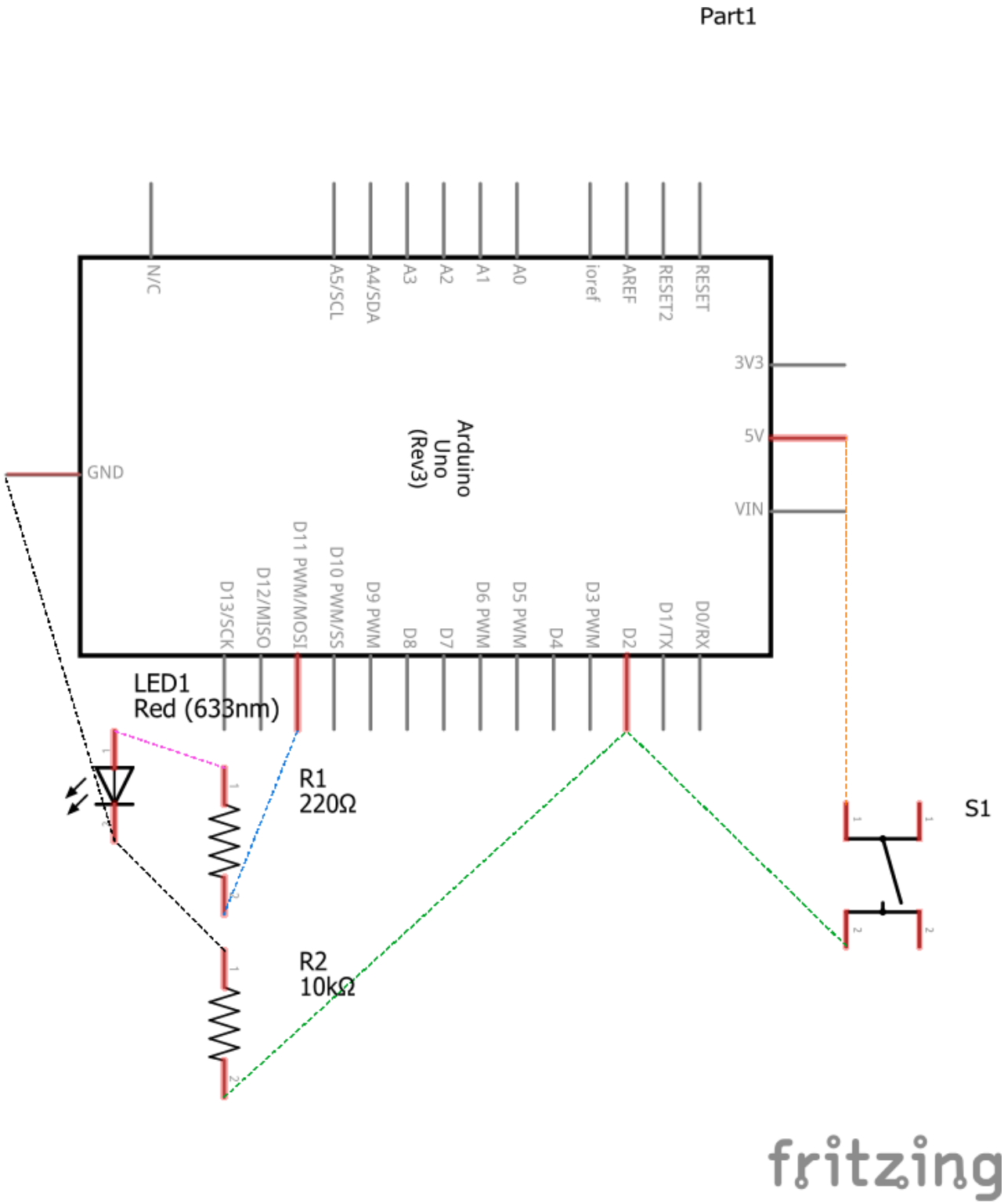
```
  delay(650);                // wait for 650ms
  digitalWrite(led, LOW);    // turn the LED off by making the voltage LOW
  delay(150);                // wait for 150ms
  digitalWrite(led, HIGH);   // turn the LED on (HIGH is the voltage level)
  delay(650);                // wait for a second
  digitalWrite(led, LOW);    // turn the LED off by making the voltage LOW
  delay(150);                // wait for 150ms


  digitalWrite(led, HIGH);   // turn the LED on (HIGH is the voltage level)
  delay(1200);               // wait for 1,2 seconds
  digitalWrite(led, LOW);    // turn the LED off by making the voltage LOW
  delay(150);                // wait for 150ms
  digitalWrite(led, HIGH);   // turn the LED on (HIGH is the voltage level)
  delay(1200);               // wait for 1,2 seconds
  digitalWrite(led, LOW);    // turn the LED off by making the voltage LOW
  delay(150);                // wait for 150ms
  digitalWrite(led, HIGH);   // turn the LED on (HIGH is the voltage level)
  delay(1200);               // wait for 1,2 seconds
  digitalWrite(led, LOW);    // turn the LED off by making the voltage LOW
  delay(150);

  digitalWrite(led, HIGH);   // turn the LED on (HIGH is the voltage level)
  delay(650);                // wait for 650ms
  digitalWrite(led, LOW);    // turn the LED off by making the voltage LOW
  delay(150);                // wait for 150ms
  digitalWrite(led, HIGH);   // turn the LED on (HIGH is the voltage level)
  delay(650);                // wait for 650ms
  digitalWrite(led, LOW);    // turn the LED off by making the voltage LOW
  delay(150);                // wait for 150ms
  digitalWrite(led, HIGH);   // turn the LED on (HIGH is the voltage level)
  delay(650);                // wait for 650ms
  digitalWrite(led, LOW);    // turn the LED off by making the voltage LOW
  delay(2000);               // wait for 2 secconds before starting the loop again
}
```

Testasimme SOS morsekoodin toimivuutta eri viiveillä.

Piirilevydiagrammi, B



Koodi, B

```
void setup() {
  // initialize the LED pin as an output:
  pinMode(led, OUTPUT);
  // initialize the pushbutton pin as an input:
  pinMode(buttonPin, INPUT);
}

void loop() {
  // read the state of the pushbutton value:
  buttonState = digitalRead(buttonPin);

  // check if the pushbutton is pressed.
  // if it is, the buttonState is HIGH:
  if (buttonState == HIGH) {
    digitalWrite(led, HIGH);   // turn the LED on (HIGH is the voltage level)
    delay(650);                // wait for 650ms
    digitalWrite(led, LOW);    // turn the LED off by making the voltage LOW
    delay(150);                // wait for 150ms
    digitalWrite(led, HIGH);   // turn the LED on (HIGH is the voltage level)
    delay(650);                // wait for 650ms
    digitalWrite(led, LOW);    // turn the LED off by making the voltage LOW
    delay(150);                // wait for 150ms
    digitalWrite(led, HIGH);   // turn the LED on (HIGH is the voltage level)
    delay(650);                // wait for a second
    digitalWrite(led, LOW);    // turn the LED off by making the voltage LOW
    delay(150);                // wait for 150ms


    digitalWrite(led, HIGH);   // turn the LED on (HIGH is the voltage level)
    delay(1200);               // wait for 1,2 seconds
    digitalWrite(led, LOW);    // turn the LED off by making the voltage LOW
    delay(150);                // wait for 150ms
    digitalWrite(led, HIGH);   // turn the LED on (HIGH is the voltage level)
    delay(1200);               // wait for 1,2 seconds
    digitalWrite(led, LOW);    // turn the LED off by making the voltage LOW
    delay(150);                // wait for 150ms
    digitalWrite(led, HIGH);   // turn the LED on (HIGH is the voltage level)
    delay(1200);               // wait for 1,2 seconds
    digitalWrite(led, LOW);    // turn the LED off by making the voltage LOW
    delay(150);                // wait for 150ms

    digitalWrite(led, HIGH);   // turn the LED on (HIGH is the voltage level)
    delay(650);                // wait for 650ms
    digitalWrite(led, LOW);    // turn the LED off by making the voltage LOW
    delay(150);                // wait for 150ms
    digitalWrite(led, HIGH);   // turn the LED on (HIGH is the voltage level)
    delay(650);                // wait for 650ms
```

```
    digitalWrite(led, LOW);    // turn the LED off by making the voltage LOW
    delay(150);                // wait for 150ms
    digitalWrite(led, HIGH);   // turn the LED on (HIGH is the voltage level)
    delay(650);                // wait for 650ms
    digitalWrite(led, LOW);    // turn the LED off by making the voltage LOW
                               // wait for 2 secconds before starting the loop agai
n

 } else {
    digitalWrite(led, LOW);    // turn LED off
  }
}
```

SOS -morsekoodi lähti pyörimään napin painalluksella, napin uudelleen painaminen ei aloita ohjelmaa alusta ennen, kuin aikaisempi suoritus on päättynyt.