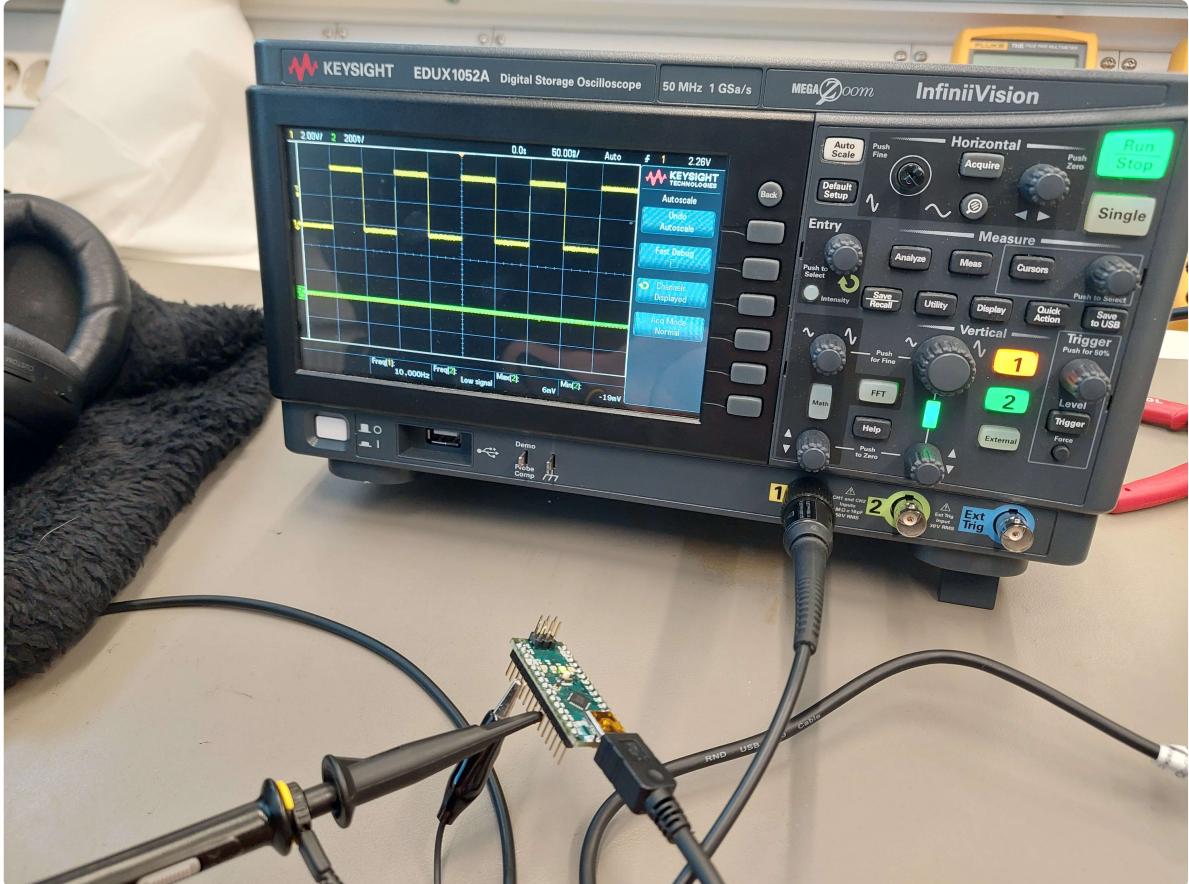


Labra 41

1. Kyseessä on saada taajuus 10 Hz, $1000 = 1$ sekuntti, $1000/10 = 100 = 0.1$ sekuntti ja tarvitaan puolia tästä arvosta eli `delay (50)

2.

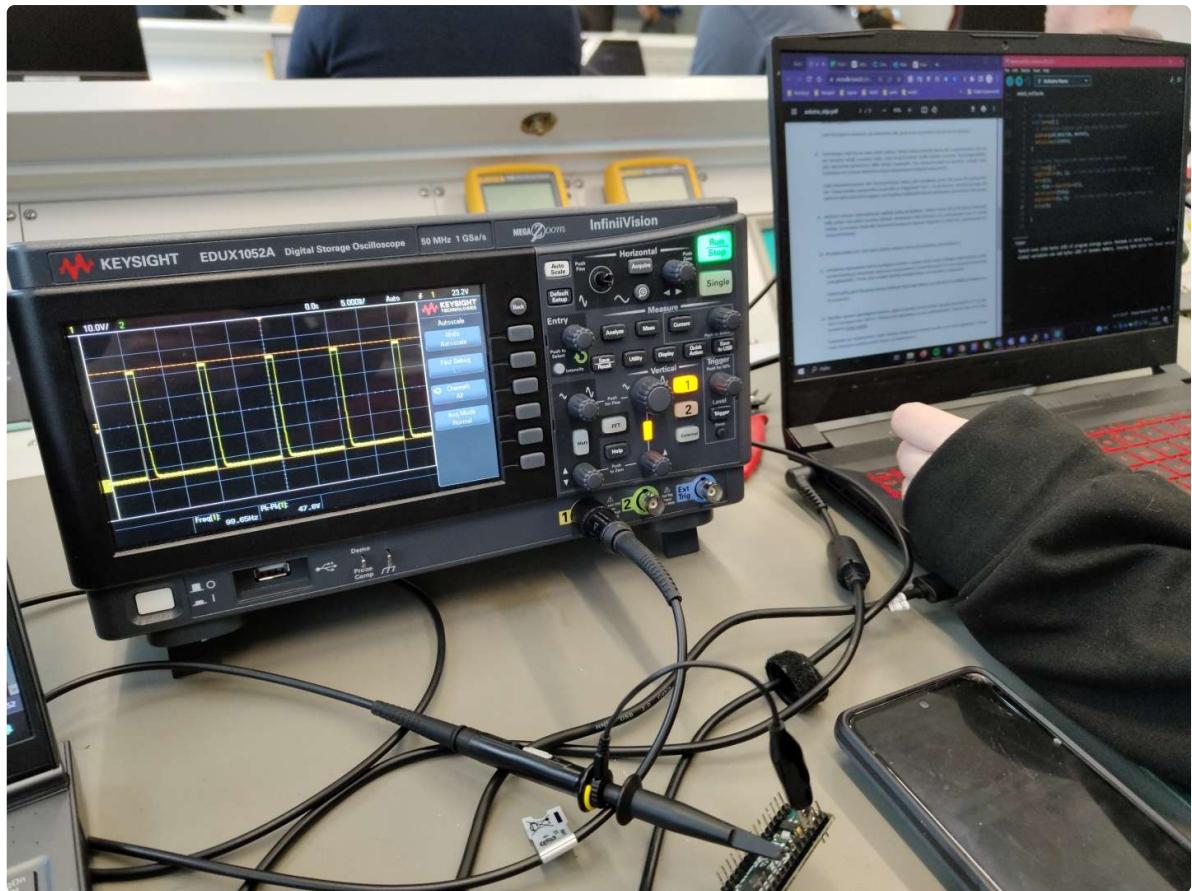


3. Ei muutoksia

4. Maksimi taajuus on 500 Hz, ja minimi taajuus on joku 0.015 Hz

```
sketch_oct12a.ino
1
2
3 // the setup function runs once when you press reset or power the board
4 void setup() {
5     // initialize digital pin LED_BUILTIN as an output.
6     pinMode(LED_BUILTIN, OUTPUT);
7     Serial.begin(4800);
8 }
9
10 // the loop function runs over and over again forever
11 void loop() {
12     digitalWrite(6, 1); // turn the LED on (HIGH is the voltage level)
13     delay(1);
14     int tila = digitalRead(6);
15     Serial.print(tila);
16     digitalWrite(6, 0); // turn the LED off by making the voltage LOW
17     delay(9);
18
19 }
20
```

5.



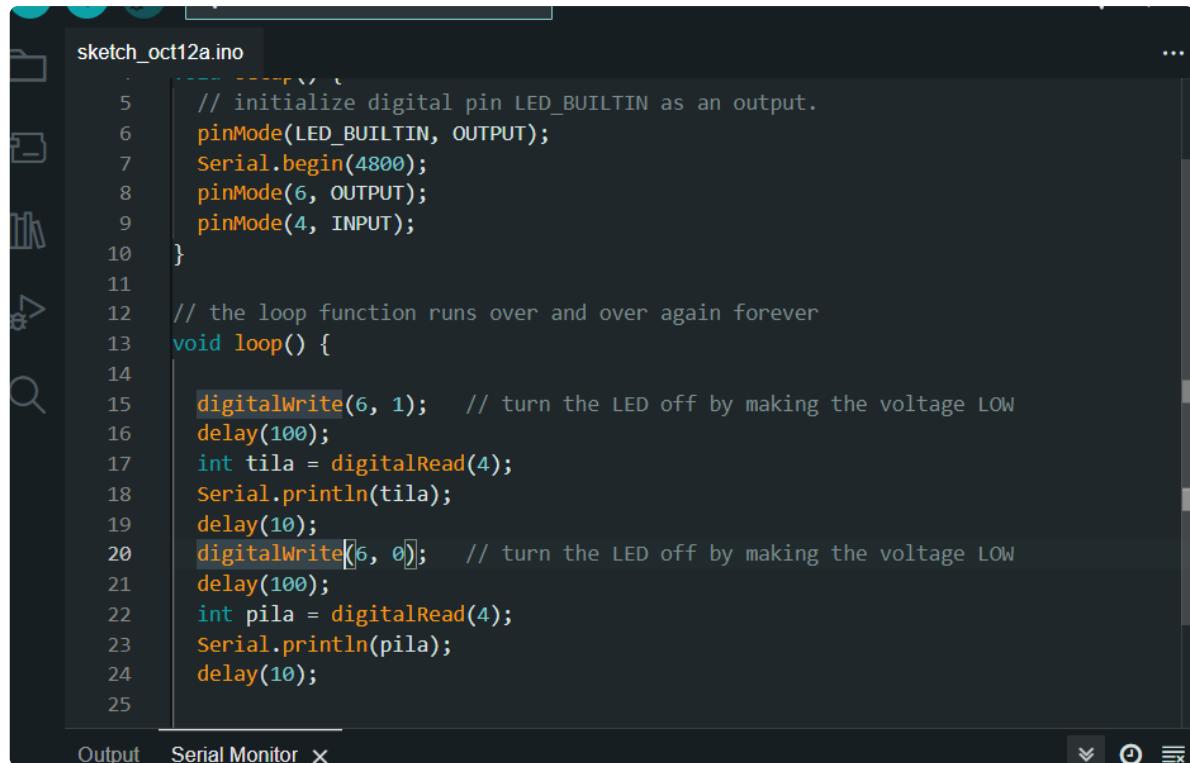
6. Ei saa, koska digitaalipinnistä

7.

8.

```
9. void setup (){  
    //initialize digital pin LED_BUILTIN as an output.  
    pinMode(LED_BUILTIN, OUTPUT);  
    Serial.begin(4800);  
    pinMode (6, OUTPUT);  
    pinMode (4, INPUT)  
  
    void loop (){  
        digitalWrite(6,1); // turn the LED on  
        delay (100);  
  
        digitalWrite (6,0); // turn the LED off  
        delay (100);  
  
        int tila = digitalRead (4);  
        serial.println(tila);  
        delay(10);  
    }  
}
```

10.



The screenshot shows the Arduino IDE interface with the following details:

- Title Bar:** sketch_oct12a.ino
- Code Area:** Displays the C++ code for the sketch. Lines 5-10 define the setup() function, which initializes pins 6 and 4. Lines 12-25 define the loop() function, which alternates between turning the LED on (digitalWrite(6, 1)) and off (digitalWrite(6, 0)), reads the state of pin 4, and prints it to the Serial Monitor.
- Toolbars and Menus:** Standard Arduino IDE menu items like File, Edit, Tools, Sketch, Help, and a recent files dropdown.
- Status Bar:** Shows tabs for "Output" and "Serial Monitor" along with other status icons.