Exercise 9_Temperatur sensor

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```
1    int val = 0;
2    float voltage = 0;
3    float celscius = 0;
4
5    void setup() {
6      Serial.begin(9600);
7    }
8
9    void loop() {
10     delay(1000);
11
12     val = analogRead(A0);
13     voltage = 5./1023.*val;
14     celscius = voltage * 100;
15     Serial.println(val);
16     Serial.print(voltage);
17     Serial.println("V");
18     Serial.print(celscius);
19     Serial.println("°C");
20
21   }
```

Output   Serial Monitor ✕

Message (Enter to send message to 'Arduino Uno'

```
0.25V
24.93°C
51
0.25V
24.93°C
51
0.25V
24.93°C
51
0.25V
24.93°C
```

Questions

- 9a: What is wrong in this conversion from analogRead() to voltage?

```
int in = analogRead(A0);
double vol = (in / 1024) * 5000;
```

If you want the voltage in mV, then the input and the number 5000 should be switched around

- 9b: What would the output of this code be?

```
char c;
for (int i = 0; i < 4; i++) {
    c = '0' + i*2;
    Serial.print(c);
    Serial.write(176);
}
```

It will display 0°2°4°6°

- 9c: What is the difference between print() and write()

Print() converts and display the data as ascii code, where write() just sends raw bytes of data