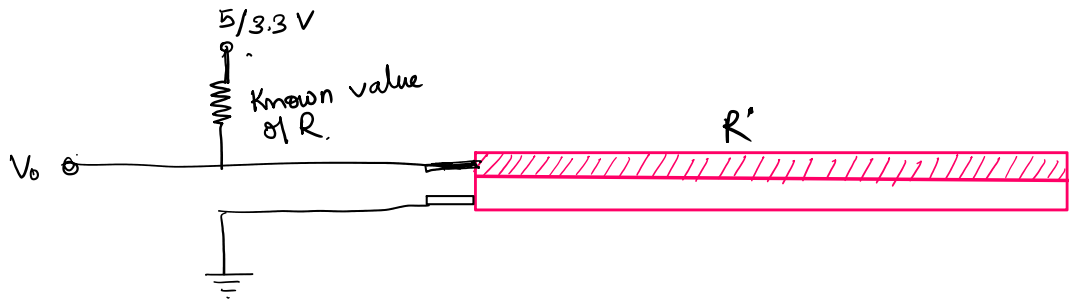
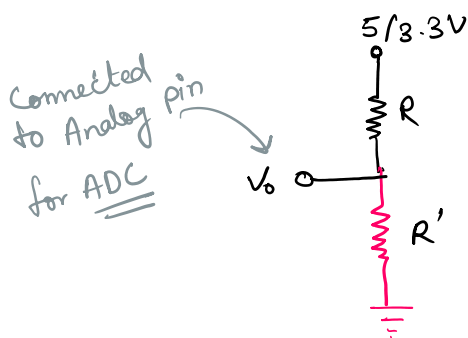


Flex Sensor

19 December 2023 07:00 PM



↓
Simplified



When converted to ADC, the microcontroller reads the analog voltage and gives values ranging from [0 - 1023]

Connected in Voltage divider connection.

But why?

- Easier for microcontroller to read voltages
- As R' changes V_o changes hence bend can be measured.
- By varying (R) fixed, we can vary the range of I/p voltage.

Voltage Divider rule.

$$V_o = V_{in} \times \frac{R'_{flex}}{R + R'_{flex}}$$

5V/3.3V

To decide range of V_o, we have to decide the value of R
Based on the values given by R'_{flex}.

To decide range of \sim , \sim
Based on the values given by Rden.