EXPERIMENT 3

Objectives

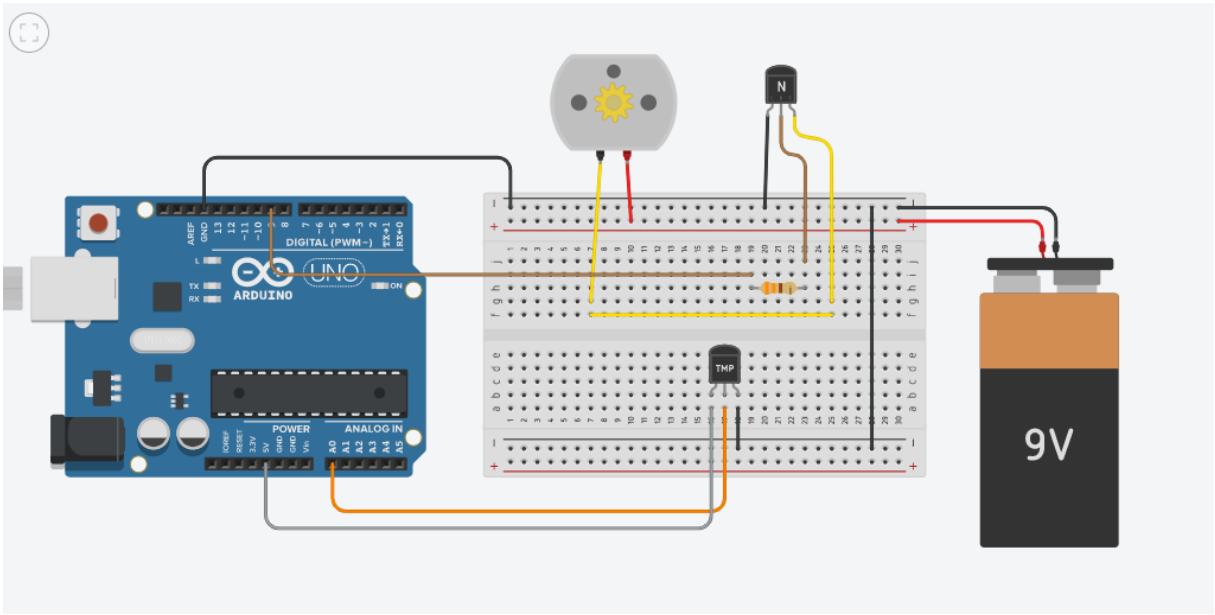
The objective of this experiment is controlling a DC motor using temperature sensor by getting analog data from analog input pins of Arduino.

List of Components

- Arduino
- Multimeter
- Resistor
- Temperature Sensor
- DC Motor
- NPN Transistor
- Battery (3V-9V)
- Breadboard

Instructions

Build the circuit below. The temperature sensor represented with TMP controls the DC motor. Write an Arduino code so that when the defined temperature value is exceed the DC motor will run. The transistor represented with N is used here in order to prevent Arduino from high current flow.



Measurements and Discussions

1- What happens when you change the battery's value?

2- Change the pins of DC motor. Does it still run? What is the difference?