

Working of project model

The working of this project is the input is taken from a temperature sensor. The output pins are connected to LEDs. The control pins of LM35 is connected to the Arduino. The time is taken by the Arduino to convert analog data into digital form is dependent on the frequency of clock sequence. Different value for the temperature representation are selected, which in turn are provided to display port. Display port includes LCD display devices. The Temperature sensor LM35 senses the temperature and converts it into an electrical (analog) signal, which is applied to the ATmega328 microcontroller of the Arduino UNO Board. In this the Arduino UNO board converts the recorded signal from analog to digital signal. So that the recorded values of the temperature and speed of the fan are displayed on the LCD. When the temperature crosses 26°C the fan starts rotating. A low-frequency pulse-width modulation (PWM) signal, whose duty cycle is varied to adjust the fan's speed is used. An inexpensive, single, small pass transistor-like 2N222 or BD139 can be used here. It is efficient because the pass transistor is used as a switch.

Hardware implementation

