**AUTO CONTROLLED FAN BASED ON THE TEMPERATURE**

**ABSTRACT:**

The temperature-controlled fan or dc motor designed with microcontroller is quite useful for conference halls, auditoriums, cinema halls, and other commercial organizations where many people gathered together and lot of fans or dc motors are required at these places. Depending up on the weather condition, organizers of the above places are supposed to be control each and every fan, otherwise lot of energy will be wasted. Controlling each and every fan or dc motor manually is highly impossible; there by this project work is taken up, which controls the fan automatically depending up on the temperature. Here for the demonstration purpose single fan is considered, but in practical all the fans or dc motor can be connected to this single instrument, so that all the fans or dc motors rotates equally.

       The basic concept of this project work is, depending up on the room temperature to control the fan or dc motor speed automatically. Since our weather conditions are widely varied, temperature up and downs are common in our country. When the temperature is less than particular degrees centigrade fan or dc motor is not required, there by a facility is provided in the system that the fan or dc motor will be switched off automatically at less than certain degrees. The system is programmed to run the fan or dc motor at its maximum speed at particular degrees centigrade. Therefore the fan or dc motor speed varies linearly based on certain degree centigrade which has been set by the user.

**BLOCK DIAGRAM:**

Power supply

UNIT

PIC

MICROCONTROLLER

MOSFET DRIVER CIRCUIT

FAN OR

DC MOTOR

TEMPERATURE SENSOR

LCD

DISPLAY UNIT