**DIGITAL THERMOMETER**

**ABSTRACT:**

Thermometers are useful apparatus being used since long time for temperature measurement. In this project we have made an Arduino based digital thermometer to display the current ambient temperature on a 16x2 LCD unit in real time . It can be deployed in houses, offices, industries etc. to measure the temperature. We can divide this **thermometer** into three sections - The first section senses the temperature by using temperature sensor, second section converts the temperature value into a suitable numbers in Celsius scale which is done by Arduino, and last part of system displays temperature on 16X2 LCD.

In this project, we interfaced LM35 Temperature Sensor with Arduino to design a digital thermometer. The measured temperature will be directly displayed on a 16\*2 LCD. LM35DZ is capable of reading the temperature in Centigrade scale. The output voltage of the sensor is directly proportional to the temperature in centigrade. LM35 can be used in the range of -55°C to +150°C with +/- 0.75°C accuracy. So let’s learn how to design a Digital Thermometer Using Arduino & LM35 Temperature Sensor.