INTERFACING AND PROGRAMMING OF TEMPERATURE SENSOR WITH ARDUINO

```
#include <LiquidCrystal.h>


// initialize the library with the numbers of the interface pins

LiquidCrystal lcd(2 ,3 ,4 ,5 ,6 ,7);


//declare variables

float tempC;

float tempF;

int tempPin = A1;

int buzzpin = 8;


void setup(){

  pinMode(buzzpin,OUTPUT);


  lcd.begin(16, 2);    // set up the LCD's number of columns and rows:

  lcd.print("Temp1=");

  lcd.setCursor(0, 1);

  lcd.print("Temp2=");

}


void loop(){

  tempC = analogRead(tempPin);        //read the value from the sensor

  tempC = (5.0 * tempC * 100.0)/1024.0;  //convert the analog data to temperature

  tempC = tempC-2;
```

```
    tempF = ((tempC*9)/5) + 32;          //convert celcius to farenheit



  lcd.setCursor(6, 0);

  lcd.print(tempC);    // print result to lcd display

  lcd.print("'C");


  lcd.setCursor(6, 1);

  lcd.print(tempF);    // print temp in farenheit

  lcd.print("'F");


  // to buzz buzzer

  if (tempC>40)

  digitalWrite(8,1);

  else

  digitalWrite(8,0);


  // sleep...

  delay(1000);

}
```