



CODE:

```
#include <LiquidCrystal.h> //LCD library
#define echo 2
#define trig 3
float duration;
float distance;
int sensor_Input;
float temp;
LiquidCrystal lcd(13, 12, 11, 10, 9, 8);

void setup()
{
  pinMode(trig, OUTPUT);
  pinMode(echo, INPUT);
  Serial.begin(9600);
  lcd.begin(16, 2);
}

void loop()
```

```
{  
  time_Measurement();  
  distance = duration * (0.0343)/2;  
  display_distance();  
  measure_Temp();  
}
```

```
void time_Measurement()  
{  
  digitalWrite(trig, LOW);  
  delayMicroseconds(2);  
  digitalWrite(trig, HIGH);  
  delayMicroseconds(10);  
  digitalWrite(trig, LOW);  
  duration = pulseIn(echo, HIGH);  
}
```

```
void measure_Temp()  
{  
  sensor_Input = analogRead(A0);  
  temp = (float)sensor_Input / 1024;  
  temp = temp * 5;  
  temp = temp - 0.5;  
  temp = temp * 100;  
  Serial.print("Temp in C: ");  
  Serial.print(temp);  
  Serial.println();  
}
```

```
void display_distance()  
{  
  Serial.print("Distance in Cm: ");  
  Serial.print(distance);  
  Serial.println();  
  delay(100);  
}
```