



```
#include <LiquidCrystal.h>
```

```
#define RS 8
```

```
#define EN 9
```

```
#define D7 7
```

```
#define D6 6
```

```
#define D5 5
```

```
#define D4 4
```

```
#define LM35_pin 1
```

```
LiquidCrystal lcd( RS, EN, D4, D5, D6, D7 );
```

```
void setup()
```

```
{
```

```
    analogRead( LM35_pin );
```

```
    lcd.begin( 2, 16 );
```

```
}
```

```

void loop()
{
    float temp = readTemp();
    sendTempToLCD( temp );
}

float readTemp()
{
    float temp = 0.0;
    int val = 0;
    int nread = 5;
    float somma = 0.0;
    for (int i = 0; i < nread; i++)
    {
        val = analogRead( LM35_pin );
        temp = ((val*0.00488)-0.5) / 0.01;
        somma += temp;
    }
    return ( somma / nread );
}

void sendTempToLCD( float temp )
{
    lcd.clear();
    lcd.setCursor( 0, 0 );
    lcd.print( "Temperatura di: " );
    lcd.setCursor( 0, 1 );
    lcd.print( temp );
    lcd.print( ' ' );
    lcd.print( (char) 223 );
    lcd.print( 'C' );
}

```

```
delay( 250 );  
}
```