#include<LiquidCrystal.h>

#include <Servo.h>

int pot;

int led = 7;

int sensor = A0;

int sensorValue = 0;

Servo serial;

LiquidCrystal lcd (12, 11, 5 , 4 , 3, 2);;

void setup() {

  Serial.begin(9600);

  pinMode(led, OUTPUT);

  pinMode(sensor, INPUT);

}

void loop() {

  serial.write(map(pot,22,40, 0 ,180));;;

```
lcd.begin(16,2);
sensorValue = analogRead(sensor);


if(sensorValue > 100) {
  digitalWrite(led, HIGH);
  lcd.print("LED");
  lcd.setCursor(0, 1);
  lcd.print("LIGADO =)");
}
else{
  digitalWrite(led,LOW);
  lcd.print("LED");
  lcd.setCursor(0,1);
  lcd.print("DESLIGADO =(");
}
Serial.print ("Leitura atual do sensor: ");
Serial.println(sensorValue);
delay(1000);
}
```