1. /\*
2. \* Ultrasonic Sensor HC-SR04 and Arduino Tutorial
3. \*
4. \* Crated by Dejan Nedelkovski,
5. \* www.HowToMechatronics.com
6. \*
7. \*/
8. #include <LiquidCrystal.h> // includes the LiquidCrystal Library
9. LiquidCrystal lcd(1, 2, 4, 5, 6, 7); // Creates an LCD object. Parameters: (rs, enable, d4, d5, d6, d7)
10. const int trigPin = 9;
11. const int echoPin = 10;
12. long duration;
13. int distanceCm, distanceInch;
14. **void** setup() {
15. lcd.begin(16,2); // Initializes the interface to the LCD screen, and specifies the dimensions (width and height) of the display
16. pinMode(trigPin, OUTPUT);
17. pinMode(echoPin, INPUT);
18. }
19. **void** loop() {
20. digitalWrite(trigPin, LOW);
21. delayMicroseconds(2);
22. digitalWrite(trigPin, HIGH);
23. delayMicroseconds(10);
24. digitalWrite(trigPin, LOW);
25. duration = pulseIn(echoPin, HIGH);
26. distanceCm= duration\*0.034/2;
27. distanceInch = duration\*0.0133/2;
28. lcd.setCursor(0,0); // Sets the location at which subsequent text written to the LCD will be displayed
29. lcd.print("Distance: "); // Prints string "Distance" on the LCD
30. lcd.print(distanceCm); // Prints the distance value from the sensor
31. lcd.print(" cm");
32. delay(10);
33. lcd.setCursor(0,1);
34. lcd.print("Distance: ");
35. lcd.print(distanceInch);
36. lcd.print(" inch");
37. delay(10);
38. }