

CHAPTER 6

RESULT



```
MAIN_Main_Main | Energia 1.8.7E21
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MAIN_Main_Main
int monitoring = 0;
int metalDetection = P1_4;

int sensor_pin = P1_3;
int output_value ;

const int trigPin = P1_0;
const int echoPin = P1_1;
long duration;

int motorPin1 = 9;
int motorPin2 = 10;

void setup()

{
  pinMode(trigPin, OUTPUT);
  pinMode(echoPin, INPUT);
  Serial.begin(9600);
  pinMode(motorPin1, OUTPUT);
  pinMode(motorPin2, OUTPUT);
  digitalWrite(motorPin1, LOW);
  digitalWrite(motorPin2, LOW);
}

void loop()

{
  digitalWrite(trigPin, LOW);
  delay(2000);
  digitalWrite(trigPin, HIGH);
  delay(100);
  digitalWrite(trigPin, LOW);
  duration = pulseIn(echoPin, HIGH);
  output_value = duration / 29;
  Serial.print(output_value);
  Serial.println();
  if (output_value > 10)
  {
    digitalWrite(motorPin1, HIGH);
    digitalWrite(motorPin2, LOW);
    delay(1000);
    digitalWrite(motorPin1, LOW);
    digitalWrite(motorPin2, HIGH);
    delay(1000);
    digitalWrite(motorPin1, LOW);
    digitalWrite(motorPin2, LOW);
  }
}
```

MSP-E/P4802ET w/ MSP430G2553 on COM7
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Figure 6.1 Software Coding



Figure 6.2 Hardware Result